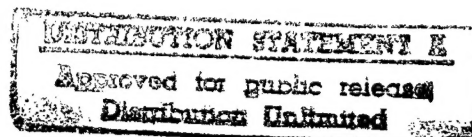


JPRS-UEA-89-014  
1 JUNE 1989



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# ***JPRS Report***



# **Soviet Union**

## ***Economic Affairs***

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# Soviet Union

## Economic Affairs

JPRS-UEA-89-014

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1 JUNE 1989

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## ECONOMIC POLICY, ORGANIZATION, MANAGEMENT

**Policy Toward Insolvent Enterprises Reviewed**  
18200274 Moscow *EKONOMICHESKAYA GAZETA*  
in Russian No 11, Mar 89 p 15

[Article by P. Subbotin, deputy chief of the USSR Gosbank management board's administration for planning and coordinating the activity of banks: "The Enterprise Has Been Declared Insolvent"; first paragraph is *EKONOMICHESKAYA GAZETA* introduction]

[Text] *What is concealed behind this? What is the subsequent fate of an insolvent enterprise? Who will settle accounts for its obligations to workers, employees, suppliers, the budget, and the bank? P. Subbotin, deputy chief of the USSR Gosbank management board's administration for planning and coordinating the activity of banks and candidate of economic sciences, answers our readers' questions.*

The role of the timely payment for products delivered in accordance with the parties' contract obligations has grown substantially with the shift of enterprises and organizations to complete cost accounting and self-financing. This has caused the need for a radical restructuring in relationships with insolvent enterprises and organizations. The USSR laws on a state enterprise and on the cooperative system have granted banks the right to declare state enterprises and cooperatives, which systematically violate payment discipline, insolvent and report this to the major suppliers of commodity and material valuables, the higher agency and the press. When doing this, the question of declaring an enterprise insolvent should be resolved in each specific case depending on the realities of the measures taken to improve its work, eliminate unprofitableness and strengthen its financial position over a period of no more than six months.

Having found out that a purchasing enterprise has been declared insolvent, creditor enterprises can halt product deliveries to it, the performance of work or the providing of services, that is, unilaterally refuse to fulfill the contract (completely or partially).

Along with this, the substance of a bank's credit and account relationships with an insolvent enterprise is being subjected to substantial restructuring. It is being transformed into special credit and account conditions. The credits, which were earlier issued to the enterprise, incur an early penalty and the issuing of new loans is halted. Using its security right, the bank directs the earnings coming from the sale of products directly toward the repayment of the overdue loans. The bank, however, does not leave the enterprise to the mercy of fate; it carefully analyzes the enterprise's economic and financial activity and can provide the necessary credit assistance when results are improved.

The establishment of the payment schedule for the insolvent enterprise's obligations is the prerogative of the bank director. Without some kind of schedule, it can only use a small portion of the assets from in-coming receipts to satisfy urgent needs.

What considerations should guide a bank when deciding about introducing a specific payment schedule?

Perhaps only one—does it contribute to the elimination of the reasons that caused the insolvency? Thus, if the main reason for one enterprise is the accumulation of above-plan stocks of raw materials and materials and for another—an overexpenditure in the wage fund, then it would appear logical for the bank director's decision on establishing a stricter schedule to direct the monetary receipts of these enterprises to payments for material valuables and the issuance of assets for wages, respectively.

If one approaches an enterprise, which has been declared insolvent, with purely commercial and market yardsticks, one can say that this enterprise is on the verge of bankruptcy or official recognition of its insolvency when it finally loses the right to manage and dispose of its property on its own. Here, however, it is necessary to make one substantial stipulation: We have no law on bankruptcy, but the "prospects" for reorganizing or eliminating an insolvent enterprise exist in reality. The director of the bank's lower institution resolves the question of restoring an enterprise's credit as the enterprise's work indicators and financial situation improve. Suppliers, who had previously been told about the application of sanctions, are informed about their cancellation.

It is possible to cite quite a few examples where unprofitable and insolvent enterprises have in the past achieved the stabilization of their financial position, settled up with their suppliers and banks in a timely fashion and are now working profitably because they shifted to more advanced economic production management methods.

Thus, the solvency of the Mogilevskiy Home Labor Combine was restored during the last six months of 1988 with the help of the local Zhilsotsbank branch. Bank representatives presented concrete proposals to normalize the combine's financial situation to the labor collective council. As a result, measures to reduce excessive stocks of raw material worth 890,000 rubles and finished products worth 485,000 rubles in 1988 were worked out and basically implemented. Debts to suppliers totaling 1.4 million rubles, which existed in the past, were completely paid off.

USSR Promstroybank institutions are now performing preventive work with so-called candidates for insolvent enterprises. We are primarily talking about unprofitable enterprises for which the bank and the ministries have developed programs to eliminate unprofitability with the

time frames for their becoming profitable indicated. In general, it is planned to eliminate the unprofitability of 765 industrial enterprises during 1988-1990.

In this respect, the work experience of the Promstroybank Kaluga branch in Ivano-Frankovsk Oblast with the Khlorvinil Association of the USSR Ministry of the Chemical Industry, which had been unprofitable according to the plan since 1986, deserves attention. Its shift to profitable operations was planned for 1989. However, instead of a loss of 2.5 million rubles in 1988, the enterprise received 11.5 million rubles of profit based on its 1988 work results. The association's shift to the second cost accounting model contributed to the more effective use of production potentials and the accelerated introduction of new capacities for the production of ethylene, propylene and benzene. The smoothness in dispatching products to users was improved.

In turn, the bank's Kaluga branch contributed to the development of intraproduction cost accounting in Khlorvinil. A credit accounting group for servicing its production units, which consisted of bank and enterprise workers, was established for these purposes. The measures taken resulted in the stabilization of the association's payment discipline and financial situation. The turnover rate of working capital was accelerated from 45 days in 1987 to 30 days in 1988.

Similar work to eliminate the unprofitability of enterprises is being carried out in all national economic complexes and branches. In this regard, the carrying out of such measures as the combining of enterprises that are not capable of eliminating unprofitability within the time frame mentioned by the government (basically during 1989; and for larger individual enterprises—no later than 1990) with economically sound enterprises; their transfer to leases; and where it is unavoidable—their elimination, are recommended.

USSR banks and the USSR Ministry of Finance are introducing proposals to eliminate or reorganize insolvent enterprises. In practice, there have already been cases of the elimination or reorganization of enterprises that a bank has declared insolvent. In particular, at the suggestion of the Zhilsotsbank Grodno Oblast administration and oblispolkom, the Belorussian SSR Ministry of Local Industry decided to eliminate the Grandichskiy Woodworking Combine on 1 October 1988. This small enterprise employing 251 people permitted losses of up to 155,000 rubles over the course of the last three years, although the plan called for the receipt of a profit. The main reason for this situation was the low technical level of production, the large losses from defective goods and fines for the poor quality of products and violations of contract obligations.

The financial help, which the ministry provided for the payment of the collective's wages during the period sanctions were applied, did not provide the desired results since it was not accompanied by a restructuring in

all the aspects of the combine's activity. The production capacities, which belonged to it, were transferred to two enterprises subordinate to the Belorussian SSR Ministry of Local Industry.

The process of eliminating unprofitable enterprises is also taking place in agriculture. Six unprofitable sovkhozes were eliminated last year in the Kazakh SSR. A total of 23 economically weak, low profit or unprofitable sovkhozes were transferred to the balance sheet of industrial transport and construction enterprises in the Azerbaijan SSR in order to further expand subsidiary rural farms and increase the output of agricultural products.

The distinctive feature in reorganizing or eliminating an enterprise in our country consists of the fact that the higher agency, which has made this decision, is obliged to guarantee the rights that have been stipulated by the USSR Constitution and laws for dismissed workers: timely warning of the dismissal, maintenance of average wages and uninterrupted length of service during job placement, and the providing of assistance—along with the councils of peoples deputies—during the job placement of the freed workers.

Regarding the economic interrelationships of the suppliers and purchasers with the insolvent enterprises being eliminated and reorganized, the Statute on the Procedure for Establishing, Reorganizing and Eliminating Enterprises Associations, Organizations and Establishments, which was approved by Decree No 816 of the USSR government on 2 September 1982 and by the directions in the 17 March 1983 Instructions No 37 of the USSR Ministry of Finances, USSR Ministry of Justice, USSR Gosplan, USSR Gosbank, and USSR Central Statistical Administration regulate them.

In accordance with legislation in effect, all property rights and obligations of the joining enterprise are transferred when one enterprise is combined with another.

The elimination of an enterprise is carried out either by an elimination commission that has been appointed by the higher agency or on the instructions of the director of the enterprise being eliminated. The higher agency establishes the procedure and time frame for eliminating the enterprise. It resolves the question of the procedure for carrying out contracts, which have been concluded, so that there will be no damage to the fulfillment of the state plan. At the same time, the higher agency determines the period for creditors to submit their claims to the enterprise being eliminated. This period cannot be less than one month.

The elimination commission reports the elimination of the enterprise and the period for creditors to submit claims in the press. Claims on the enterprise being eliminated are satisfied using its property on which penalties can be assessed according to law.

As is evident, the normative acts mentioned above were issued long before the carrying out of radical economic reforms and their content should be brought into compliance with the requirements of the USSR laws on a state enterprise (association) and on the cooperative system in the USSR.

**Number of Enterprises Declared Insolvent  
(according to USSR Gosbank data)**

	In 1988	on 1 January 1989
For the country as a whole	1752	1167
Including:		
RSFSR	509	310
Ukrainian SSR	529	320
Belorussian SSR	2	—
Uzbek SSR	163	116
Kazakh SSR	326	241
Georgian SSR	70	58
Azerbaijan SSR	54	51
Lithuanian SSR	—	—
Moldavian SSR	20	16
Latvian SSR	2	1
Kirghiz SSR	19	9
Tajik SSR	26	16
Armenian SSR	12	10
Turkmen SSR	19	18
Estonia SSR	1	1

On 1 January 1989 the following were declared insolvent: 605 State Agroindustrial Committee enterprises, 235 kolkhozes, 46 USSR Ministry of Land Reclamation and Water Resources enterprises, 27 construction enterprises, 20 housing and municipal enterprises, and others.

**State Acceptance Enters Third Year Despite Problems**

18200208 Yerevan *KOMMUNIST* in Russian  
3 Feb 89 p 1

[Article by V. Arutyunyan, deputy chief of the Administration of Industrial Statistics of the ArSSR State Committee for Statistics (Goskomstat), and I. Karapetyan, under the heading "Economic Review": "State Acceptance: The Third Year"]

[Text] State acceptance was introduced 2 years ago to toughen quality control of products being produced at a number of industrial enterprises. Last year it was in effect at 53 of the republic's enterprises. This year the number has increased by 12. Based on the results for last year, 1.7 million rubles worth of goods were finally rejected; 134.3 million rubles worth of products were accepted on the second submission, after additional work.

On the whole, state acceptance has played a positive role in raising product quality and increasing profits, which is indicated by the drop in consumer claims or their

complete absence. Thus, they decreased by a factor of 1.3 at the Yerevan Tire, 2.1 at the Garun Sewing Association and 2.6 at the Experimental Illumination Engineering Plant, and there were virtually no product claims at the Kirovakan Avtogenmash Production Association and the Artik Steklomash Plant. The Polivinilatsetat Production Association [PO] achieved a significant increase in profits.

The indicators are particularly weighty at three enterprises where state acceptance agencies are not limited to setting up barriers to defective output at the final stage of production, which was natural in the beginning of working under new conditions; they have gone farther, along the entire production process chain, accomplishing step-by-step, operation-by-operation quality control of product output, becoming real assistants to the labor collectives. State acceptance has become an important economic stimulus of production efficiency. Thus, introduction of state acceptance at the Kamokabel Plant not only did not prevent its labor collective from fulfilling its contract obligations and selling thousands of rubles worth of goods over and above quotas, but to the contrary helped to improve the work of services, increase responsibility for defective products and attention to observing the manufacturing method, and successfully accomplish technical re-equipping of the enterprise.

Today, state acceptance has gone far and wide, winning new positions. Thus, state acceptance is already operating in all production subdivisions at the Armelektroapparat PO. Workers of the association's subsidiary—the Vedi Low-Voltage Equipment Plant—where state acceptance was introduced 1 whole year ahead of schedule, have achieved noticeable successes lately. Here they accomplish complete quality control by production phases and check not only the suitability of parts and the quality of finished products, but also for proper manufacturing methods and equipment operation.

In places where they have prepared well for state acceptance and made it a business partner in production, things are also going successfully. This cannot be said of other enterprises, the Armkhimmash PO in particular, where they try to blame state acceptance for not making their plan quotas, although they could have and should have made capital repairs to the lines before introduction of state acceptance.

According to data of the republic's State Committee for Statistics (Goskomstat), which studied the effect of state acceptance on the quality of product output, it was noted at 51 out of 53 enterprises that products being submitted were returned for additional work. This means that, due to many factors, there has not yet been a radical improvement in product quality. Moreover, state acceptance has brought a number of difficult problems to the attention of enterprises, problems which state acceptance itself is unable to resolve, and they are having a serious effect on many aspects of the enterprises' activities. The problems are not new: fulfillment of the



production program; labor intensiveness of operations; product production costs; quality of incoming semifinished products and items for completing manufacture.

Of course, nonfulfillment of the production program is not directly linked to introduction of state acceptance, but the very fact that products are returned for additional work results in disruption of the smooth flow of the work, with all the ensuing consequences, and an increase in costs and, naturally, labor intensiveness. Thus, for example, labor intensiveness increased sharply at the Armkhimmash and Armelektromash associations (25 and 7 percent, respectively). Costs per ruble of production output increased at the Nairit Milling Machine Plant NPO [Scientific Production Association], the Electric Bulb Plant, and the Garun PShO [Production Sewing Association]. If you add that the overwhelming number of cooperating enterprises do not work under conditions of state acceptance and thus place the enterprises at which this system has been introduced into a difficult position due to the quality of incoming raw materials and items for completing manufacture and disruptions in the smooth flow of deliveries, the picture of the present state of affairs will be complete. However, there are also deliveries of low-grade raw materials and materials by cooperating enterprises that also have switched to state acceptance, as in the case of the Kirovakan Furniture Association.

The debates and discussions continue about the effectiveness of the state acceptance system and the future prospects of its operation. Opinions differ and depend on whose states them and whose interests they express. Some see it as an indispensable lever for increasing product quality and reaching the international market; others see it as a means of non-economic coercion; still others believe it necessary to keep state acceptance by merging it with the technical control services of enterprises and making this quality control service independent, and even expanding the sphere of its functioning at cooperating enterprises.

One thing is certain—such a specific form of control as state acceptance is a traditional administrative method of resolving the most important national economic problems, a method resulting from the peculiarities of the current transitional period characterized by the simultaneous action of both administrative and economic levers. State acceptance is costing the state dearly, but at the present there is no other alternative. The conditions for the emergence of possible variants in resolving the problem of raising product quality appear when the principles of full cost-accounting [khozraschet] come into effect, and not only its elements, principles under which the production of low-grade products will be economically unprofitable for labor collectives of enterprises.

At this stage of development of the economy, it is advisable not only to preserve temporarily the state acceptance system in key directions, particularly in

machine building, but also to expand the spheres of its application to other sectors of the national economy. It is too early to write off state acceptance. Judging from the scale of destruction of buildings and facilities as a result of the monstrous earthquake in the northern regions of the republic, we can only regret that we began the transition to state acceptance in capital construction too late, much too late.

Last year, state acceptance moved onto the building sites of Yerevan for the first time and also acquired rights at two construction industry enterprises. With its introduction, building standards and rules began to be observed more strictly, and complete control and step-by-step acceptance of completed work were accomplished at projects. State acceptance included engineer preparation of the construction sites and foundations, finishing work, and subcontract work. They have organized quality control of incoming materials and structures, as well as control of instituting measures to ensure quality of construction and installation and execution of decisions made.

The psychology of the construction worker and his attitude toward the job are changing; responsibility is increasing. But state acceptance, which has become a barrier to defective work, now has its own barriers. For some reason, two state acceptance agencies operate in parallel in the capital's housing construction—in the Yerevanstroy PSMO, on the one hand, and in the Podyemstroy Trust and several organizations, on the other, although they could be merged into one. Today, construction organizations are not supplied with metrological and measuring equipment. In short, despite the advances, it is still a long way to good working conditions with high standards of production.

The December catastrophe placed new tasks before state acceptance, as well as before the labor collectives of enterprises in the southern regions of the republic located outside the earthquake zone. The fact is that, having begun to work actively to eliminate the aftereffects of the catastrophe and restore the enterprises destroyed by the savage natural disaster, they took on partial fulfillment of their production plans. This is patriotic, but let us hope product quality will not be "forgotten" in the incredible exertion of efforts to achieve quantitative indicators. And state acceptance must speak with authority here.

Product quality must be at the center of constant attention of all members of the enterprise collectives—from managers to rank-and-file workers, for the economic well-being of the enterprise and all workers depend on its level.

**Shmelev On Ways To Restore Purchasing Power,  
Soundness of Ruble**

*18200288a Moscow ZNAMYA in Russian  
No 1, Jan 89 pp 128-147*

[Article by Nikolay Shmelev: "Either Strength Or the Ruble"]

[Text] At times, one overhears the fact that with the development of the principal trends in the reform of the party's political system, the formation of the program for renovating society and the strategic plan for an offensive along the entire front has been completed.

Thus, is everything finally clear to us? Do we possess an accurate knowledge not only of where to go but also how to get there? Thus only the details and the tactical questions remain and can it be that certain not so important corrections concerned with the "handling of the problem" are inevitable? In all probability, it would be good if this were actually so. But unfortunately, this is not the case. And I fear that it will never be so.

Here I am consciously avoiding the restructuring of our political system. This is an enormous independent question and I do not consider myself sufficiently competent to enter into a serious discussion. But the "renovation of society" is not only politics for me, an economist by profession, it is even not only politics. In the face of any political changes, our society will remain depressed if we are unable to restructure the foundation on which our economic and social life is based. And here we are extremely far from bare tactics. Not only have we not solved the most basic problems concerned with the strategy of an "offensive along the entire front," but as yet we have merely outlined or designated them. Certainly, I would like to be able to state that everything is already clear. But what point is there in deceiving ourselves?

And first of all, a basic and fundamental question of our economy has not been resolved. In what manner do we intend in the future to construct our economic progress and our economic future: on the strength of authority or upon that which we have disowned in every possible way over the course of decades—and precisely on the ruble, on a firm and sound ruble, which has been, is and will be the life-giving blood of any normal and healthy economy, be it today, or 100 years or 1,000 years ago.

In all probability, there are only a few who can seriously argue that in this sense we have a severe and even tragic legacy: the illusions of the socialist-utopians of the 19th century and the pre-war years, the excitement and legality of "military communism, the brief period of sobriety in the 1920's, the terror, camps and unrestrained tyranny of the Stalinist era and the numbing sluggishness of the period of "stagnation," when everyone seemed to reject everything and when honest conscientious labor became in the eyes of some people if not a disgrace then in any case extremely close to foolishness.

What was the chief reason for the fact that our economy was distorted for entire decades, as wished by many, and the live body of national life was cut down with an axe by many and for so long a period and with all of their might? Why is it that these same people who would never climb into a nuclear reactor with an iron crowbar (or boom!) would not hesitate for a second to take a crowbar to the economy, where it would be clear to any peasant who had just finished work at a parish school that the consequences of such an invasion would be much worse and more terrible even than the consequences of an explosion of all of the demolition materials available in the country? What would cause this? Could it be the ignorance of undertaught seminarians, veterinary surgeon assistants or unmoustached schoolboys rejected in all areas for poor progress? Or could it be the ill will of pathological power lovers, for whom all of the aspirations of the people are only a means for snatching a piece of the pie from the social dining table?

I do not know and will not undertake to answer this question. In my opinion, there is more than one generation that we must examine in order to see who was guilty in this regard: evil people, national traditions, historical chance or a heavenly curse for certain mysterious sins. But a fact remains a fact and so it cannot be denied: a minimum of three generations of our people grew up and remained confident that the country's economic success is dependent upon a good and intelligent Hensek, upon our ministers possessing good comprehension and quickness, upon the diligence of our planners, upon good edicts and decrees and finally upon honesty and loyalty to the obligations of our militia—generally upon a variety of things, just so long as it is not dependent upon that which has determined and is determining success throughout the world and not just as it applies to us: upon the vital and creative capability of the country's economic organism and upon freedom of circulation in its arteries and veins.

With one's hand upon his heart, how is it possible for many people in today's generations to understand that the laws of nature and the economic laws are one and the same? And that an individual, given his pride and self conceit, can only understand these laws, be subordinate to them and use them, but that at no time will he attack them with his fists or, even worse, with a sub-machine gun. Indeed, truly: it was a boom! And it exploded. And thank God that they remained alive, although they were treated and were injured in their minds.

Is it possible that today, with our country's economy drawing close to the edge of a catastrophe, we will finally understand that our task at the present time is not to fabricate something that is unprecedented, forced or artificial and thus doomed to failure even at birth, but rather to master that which life itself has developed for us over a period of thousands of years of human development, commencing with ancient Egypt and ending with those countries and peoples who today are ahead of us?

Either strength or the ruble—from the time of Adam to the present day, there has not been and there is not now any other selection for the economy. We are not the first (nor the last) to attempt to rely upon strength. The Egyptian pyramids will forever remain in history not only as a memorial to human conceit but also to hundreds of thousands of human lives that were wasted in a futile manner. Rome collapsed and perished primarily owing to the fact that its economic base collapsed—its economy was based upon slave labor. The Russian nobility was not brought to reason and eventually it received that which it fully deserved as a result of its animal selfishness and dullness. Collectivization and the Stalinist camps littered our country with millions of human bones but produced nothing from an economic standpoint. And all of the attempts by our idealists (or adventurers, as they liked to be referred to) to break down the economic laws, to replace the market with a stick or to disfigure to an unrecognizable state the ruble, profit, competition, objective prices and market equilibrium, interest and credit, shares of stocks and bonds, the commodity exchange, currency exchange rate, the convertibility of the ruble and a healthy balanced budget—all of these attempts, as we are now convinced, also accomplished nothing insofar as achieving the desired results.

This cannot be because this can never happen! This is the position taken by the world and it stands on this position. One can shout, curse and shake his fists to his heart's content and shoot all economists down to the last one—this will change nothing. And just as there has not been a worthwhile computer in our life and there will not be one, so also the shelves in our stores are empty and they will remain so.

This is the way it is, dear countrymen. Not if we wish to live as people live. Either we understand this or we don't. But then it will be worse for us and then, as the saying goes, God help us. And generally nothing else is available owing to the fact that in some areas there are harmful trouble-makers and faultfinders who undermine our life and, even worse, scheme to sell our beloved homeland to the decadent West. No—nothing else that is simple exists in nature. People have lived before us and will live after us. And are we still sufficiently convinced that the stimuli for conscientious and creative labor in all areas and throughout the world are identical, be it America or Japan or the Solomon Islands? Yes, identical! Even the recent and still memorable attempt in China (reference being made to certain mysterious peculiarities of the eastern soul and the eastern life style) to organize its economy not on the basis of money, but rather based upon demagoguery and the whip, ended as is known in complete failure. Nevertheless, we ourselves, in accordance with our traditions and life style, are closer to industrial civilization than is China.

We often hear statements to the effect that the market in pure form does not exist anywhere in the world and particularly in industrial countries. A stern delusion, to

say the least—ignorance and blindness. Yes, today the state is attempting to improve the market and yes the monopolies are planning their production and campaigning to control the market—but only the market and nothing else! The entire system of government contracts in the industrial countries, all state enterprises, all of these mergings, absorptions, agreements and campaigns by the monopolies and all intra-firm operations by national and trans-national corporations—all of this is based upon sound money, on the market and on competition and not on the office tyranny of professional bureaucrats who are convinced that all economic life must proceed in this manner and to those areas pointed out by them. Nothing useful is to be derived from what economic history accumulated over the course of a century; the modern industrial economy has not lost. And I would add—it cannot lose. For the market and social division of labor are inseparable and the greater this division of labor, the more far-flung, broader and intense is the market. And this means its instruments: money, price, taxes, stocks and bonds, interest, credit and the currency exchange rate.

Whether we wish this or not or whether or not we are pleased by it, if our national fate is not indifferent to us and if we do not intend to be converted rapidly into an economically backward state, with the entire industrial world advancing in front of us, the ruble must be established in the center of everything. It and only it must become the gauge for economic success. It and only it must be the reward for diligent labor. But what about human souls? Concern for human souls should be displayed by those who, by virtue of their obligations, are required to do this: teachers, writers, propagandists, judges and priests.

There is no point to deceiving ourselves. The choking off of the circulatory system in our economic system has by no means been overcome and I believe that a considerable amount of time must still pass before blood will run freely through its vessels. There is the problem of general thrombophlebitis, heart irregularities and unsuitable liver and kidney activities which are unable to cleanse the blood of the waste matter of vital activities.

Because the blood runs sluggishly through our economic organism, we are still confronted by our two chief and closely interrelated diseases: first of all, the ruble is not working since neither an enterprise nor an individual can spend it for that which is desired and, secondly, even this weak and detrimental ruble will not provide an enterprise or individual with earnings commensurate with his conscientious and honest labor. And it will not permit these earnings only because we are laboring under the burden of military expenditures. Rather it will be because the economic lawlessness of enterprises and the poverty earnings level of a working individual represent the chief social conditions for the flourishing of bureaucracy—this ensures it a comfortable life, the appearance of useful employment and self-respect and complete submissiveness on the part of society. It is this then that



makes it possible for us to witness such absurdities as the maintenance in rural areas of 3 million peasant overseers or the multi-billion ruble construction of something not needed, as the BAM [Baykal-Amur Trunkline] has turned out to be, or the wasteful and irrational activities of the Ministry of Land Reclamation and Water Resources, with a recovery rate (even this is questionable) for its capital investments on the order of 40-100 years, or the delirious plans for building approximately 90 large hydroelectric power stations, which the country badly needs, a task which in terms of its economic essence differs very little from the Egyptian pyramids.

Can we, in keeping with our socialist country, make full use of the ruble? Can we master and make maximum use of all of the objective means and methods for organizing economic life, which history developed long before our time and in our absence and which are being employed very effectively today in those countries which are ahead of us in terms of their economic development? I am confident that we can. And we can primarily because these means and methods are by their very nature especially technical, socially neutral and suitable for any society that is based upon an intense division of labor among people. For the purpose of the ruble, it makes no difference which high metaphysical goal is being pursued by society: it could be a heavenly reign here on earth or perhaps a desire to simply live and to be well off. Rather than this, the chief consideration should be the intention of society to live, work, feed itself and achieve forward progress while not lagging behind others.

In the nature of a socialist society and socialist ownership, there is nothing that is in conflict with the ruble, the market or with commodity-monetary relationships. From a purely economic standpoint, a self-governing, self-recouping and self-financing socialist enterprise can build its own life in like manner and on the same basis as any other enterprise anywhere in the world, commencing with freedom of behavior on the market and ending with participation in the rights of a stockholder in the capital of other enterprises, or bank, insurance company or foreign partner. The chief consideration is for a collective of a socialist enterprise to be truly independent and a true owner of the enterprise—in a stockholding or other form. You don't like the word "owner"? Then let it appear as "proprietor" or "manager." The problem is not one of semantics.

In such a case, what is the role of the socialist state or, if we assign other names to things—the state bureaucracy? This role is exceptionally important and necessary: to define the general "rules of the game" in the market, to define the strategy for developing the country and its individual regions and to implement plans and programs of general state importance and beyond the capability of some enterprises regardless of how economically strong they might be. But here we have not fabricated anything new in economics. This also was before our time and will also exist after us. In like manner and similar to other

state functions—support for housing and needed production operations, regulation by means of taxes of excessively high incomes that irritate society and state expenditures for pensions, education, public health and social support for the homeless. We must not close our eyes to the fact that today, even in the U.S.A., by no means the most generous country in this modern world, approximately 85 percent of the expenditures for all types of education and 75 percent of that used for treating sick people are paid for out of the public funds.

Beyond any doubt, during 3 years of perestroika we have made considerable progress (especially in theory and in words) in understanding the country's true economic requirements. The contours of that model of the national economy to which we aspire are gradually coming into focus. Common sense is beginning to crowd out the dull dogmatism behind which, I am personally convinced, in 100 cases out of 100, are concealed the mercenary and self-centered interests of people who reject anything and everything, even for their own children and grandchildren, but excluding themselves.

If the work continues to proceed in the manner as planned today, then by the end of the next decade real directive planning in the form of a state order will encompass (taking into account the expected role to be played by the private-cooperative sector in our economy) not more than 12-15 percent of the entire amount of products produced in the country, that is, in essence as much as is needed for centralized control over the defense and certain other defense related branches. The 19th Party Conference laid the foundation for curtailing the operational economic functions of the party. In particular, in combination with eliminating the RAPO [rayon agro-industrial association] system in agriculture, this will signal the dismantling of two of the three stages of the present monstrous bureaucratic pyramid, which has already almost crushed our rural areas. It is obviously possible to expect the dismantling, in the foreseeable future, of the present system of industrial ministries with its chief defect—complete economic lack of responsibility of the ministries with respect to the enterprises under their command. As was emphasized recently in one extremely competent statement: "We must return to the principle of a trust and corporate organization for production and control. The future for our economy—is to be found in voluntary shareholding associations, branch and inter-branch, that will be accountable to labor collectives and not command them."

The cooperative movement is moving and beginning to expand and it can only be hoped that it will not be smothered either by taxes or by compulsory prices or simply by blind and unreasonable hatred and sabotage on the part of the local authorities. I hope (and am even confident) that the use of lease type arrangements in the rural areas will step by step overcome even the envy of absolutely corrupt idleness by neighbors and the threats "to fire at someone's house" and the resistance of rural bureaucracy which has suddenly come to understand its

own uselessness and foredoom. There are also a number of trends that are reassuring—general recognition of the need for wholesale trade in the means of production, the formation of inter-branch associations, the initial instances of collective leases for enterprises and stores, the initial attempts at issuing stock at industrial and agricultural enterprises, the appearance of the first small banks and more noticeable interest of enterprises in entering the foreign market.

And all of this against the background of a proclaimed change in the party's policies towards the material and social needs of society and towards a change in the priorities for the country's economic development and in the strategy for capital investments.

But as yet, if we are discussing healthy blood circulation in the country's economic organism, all of this is merely the beginning. We still lack the chief factor that is inherent in any normal economy and which develops not by being urged on or under threat of the whip, but rather takes shape of and by itself: we do not have a market. A single integrated market for the country where nothing—neither administrative prohibitions or arbitrary rule, nor barriers on roads linking oblasts (as during the 15th Century), nor departmental barriers, nor a monopoly of producers, nor a weak ruble, nor paralysis of the credit-financial system, nor the passport and visa regime—would interfere with a free economic flow of blood, that is, a movement of goods, capital and people. And a single integrated market (since the country's economic organism and its system of blood bearing vessels are inseparable) includes and must necessarily include the entire national economy; the market for the means of production and scientific-technical knowledge; the market for consumer goods and services; the investment market; the monetary-credit and currency market; and finally the manpower market. Yes and even this market, in the absence of a state insurance network and a state policy for employment and support for people looking for work, does not exist anywhere in the world and cannot exist. Indeed, the trade unions also are not an invention of ours and I would like to think that with the passage of time they will overcome the negative role which they play in our society today.

This entire integrated market (or this entire system of organically related markets) will function only when it and its requirements are served by a sound and freely circulating ruble as required by each and every individual. Meanwhile, such a ruble comes as no news to us, since we have already had it for 20 years and from the standpoint of the country's economic health this was undoubtedly the highest achievement of Lenin's new economic policy. And, to the contrary, its destruction was perhaps the chief economic crime of the Stalin era, a crime in which, just as in a focus, all of the economic madness of that period was reflected.

Can we restore such a ruble in our life? I believe that this question should not even be raised: we simply do not have any other selection—we must and we are obligated

to restore a sound ruble. Otherwise our entire program for perestroika and all of our hopes for our country shaking off this state of torpor are built upon sand. Perhaps our economy will still advance by means of reassurance and urging on from on high. But we have no hope for natural, self-generating and self-developing economic and scientific-technical progress in this instance.

Thus, what must be done in order to ensure proper functioning of the ruble? Much remains to be done. And I believe that at the present time we can only point out certain basic trends, which will require large-scale strategic changes if we wish to have a sound and fully active ruble. Certainly, there is no possibility of foreseeing all of the complexities and dangers which await us along this path today. But indeed, life has always been this way: the chief concern—is to commence the movement and thereafter (obviously if there is no dawdling) corrections can be made while the movement is in progress. Unfortunately, we still do not have any financial genius in sight on the order of Kolber or Count Witte. But is it possible that such a genius can be replaced by the entire world in the form of collective intelligence?

A sound ruble—this implies first of all market equilibrium, that is, equilibrium between goods and money and between the supply of goods produced in a country and the effective demand for such goods. There is also an equilibrium of state finances, that is, a complete absence of a state budgetary deficit, or the amounts of this deficit deemed acceptable for society (entrusted to its government). Finally, there is the free convertibility of the ruble into all other currencies of the world. We had all of this during the 1920's. But at the present time we have none of this.

The problem of a sound ruble and general economic equilibrium—is a complex and all-encompassing problem and it cannot be solved only by means of sharp or partial changes in individual spheres of our national economy. And under certain conditions it cannot be solved in just one hour. It is a process and, if we are not to deceive ourselves, it is a prolonged process in which final success is possible only as the total of partial and incomplete successes and as a result of slow and persistent movement along the entire front, without neglecting even the slightest trifle, assuming that it will in any way promote the achievement of the final goal.

Certainly, the first question concerned with economic equilibrium is that of the degree of physical saturation of our market with the means of production and consumer goods, that is, the question having to do with the physical reasons for today's shortages. Although it may seem paradoxical to some, I nevertheless make bold to state that if not completely then at least a considerable portion of this physical deficit is legendary and convenient for the bureaucrats in covering their prolonged and progressive paralysis of the administrative-command system and their own helplessness.

In the sphere of means of production, a true and physical deficit exists only in a few branches—involving certain construction materials, paper, low-tonnage chemical goods and “high technology” products. In all probability, items not listed here can also be found. But everything else—petroleum, metal, machine tools, tractors, combines and others—we are producing in accordance with international criteria and in considerable greater quantities than deemed adequate for our requirements. If only... Were it not for the inconceivable and excessive number of our construction projects that are not being supported properly, were it not for the inactive production capabilities and the huge pool of machine tools that stands idle, were it not for the resource-devouring economic and expenditure system and the planning mechanism which is still subordinate to the senseless gross output, were it not for the low quality and backward technical level of the machines being produced and the spare parts problem that is as yet unexplained by any human arguments and so forth. Thus, when treating our economic diseases, the importance of a purely physical deficit in the means of production is minimal. This is not the main problem.

The importance of a purely physical deficit in consumer goods on the market is not as great as one might think. Yes, we have shortages in automobiles, video tape recorders, personal computers, perhaps in refrigerators and perhaps in other products and all simply because our industry has not grown. But we now have razor blades—only what kind of madman will shave himself using such blades? Should it not be mentioned that someone, somewhere will finally direct attention to this disgrace of the country that mastered space. Are there not also shortages in footwear, fabrics, sewing products, dishware and even furniture—but who needs all of this and what are our storehouses and magazines stocked with at the present time. These shortages do not apply to all types of agricultural products—there are appalling and excessive imagined losses, but this as the saying goes is quite another story.

It is hoped that the new structural policy of the state and the conversion of enterprises over to complete cost accounting will, with the passage of time, rescue our internal market from the all-encompassing rule of the expenditure mechanism and force enterprises from an economical standpoint to produce precisely those products required for the market, particularly the market for the mass consumer. The hope exists that the central authority can, with the passage of time, curb the element of uncontrolled capita construction, as a result of which one of the most important factors of our “depressed inflation” will be controlled, that is, the same lack of balance in the consumer market—the placing in circulation of the money from the builders of all of our numerous long-term construction projects, from which there have been no products for the market over a period of 10-15 years while money was available. Perhaps someday we will come to our senses and close down the channels for inflation and the plundering of national

resources and also the work of this same Minvudkhoz [Ministry of Land Reclamation and Water Resources], with its almost 2 million workers, who earn wages but supply nothing to the market. Perhaps we will finally be able to restrain the appetite of our defense. Perhaps we will be able to reduce noticeably the number of our administrative personnel: as is known, there are 18 million of them and they are all obtaining wages. And how many of them are truly needed for the production process—who knows the answer to this question? In any case, there are roughly 1.5 million operators of private vehicles and these too are not needed. Perhaps we will be able to close down still other channels for the circulation of wage money which otherwise would add nothing to the market either directly or indirectly.

Perhaps. But all of this requires time and I fear that we do not have enough time available. The consumer market must be saturated over the next 2-3 years or the population will give up on perestroika as being hopeless and the country will once again sink into a somnolent state. Over the course of the next few years, will we be able to achieve noticeable improvements in saturating the market, particularly the consumer market? I believe so.

At state enterprises, the hope of accomplishing this is unfortunately weak, since even under the most ideal conditions time is required for bringing about such changes. Even the 6 percent annual increase planned at the present time for the Group “B” branches (despite absolute failure to solve the problem of quality and a lack of desire on the part of the customer to purchase domestic products) will scarcely be able to correct in rapid fashion the intensifying imbalance in the consumer market. Of the internal sources, a strong return may (and emphasis is placed upon the word may!) be expected only from two: agricultural contracts and from the private-cooperative sector in cities.

With regard to leases and contracts in principle, a strong step has been taken: an unconditional right to implement them has been declared for each family and each small production cooperative desiring to do so, with the leases being established for 25-50 years and even on a permanent basis in some areas. A most distressing and most difficult campaign is now commencing. And if the envious neighbors or the ignorant local authorities are not to suppress the leaseholders or small contractual collectives, then the latter will require constant and unequivocal assistance from the state today. This support must be extended to all: in connection with supplying them with goods, marketing their products and for taxation purposes and even for the direct protection of their lives by the legal protection organs.

We still cannot fail to be alarmed by the future for the cooperative movement in cities. The Law Governing Cooperation has been adopted and it is a bad law. The

19th Party Conference and the July Plenum of the CPSU Central Committee (1988) left no doubt but that the party favors cooperatives. But...

But the cooperative movement has still not recovered from the attempts by Minfin [Ministry of Finance] to nip it in the bud by means of excessive and unprecedented (anywhere else in the world) taxes—a new disaster. Reports have appeared indicating that Goskomsen [State Committee on Prices] is officially attempting to forbid cooperatives from selling their products at prices which are higher than the state prices. And this is taking place at a time when our cooperatives have already been subjected to very unfair conditions, as though they are enemies of the state and not a force operating in its behalf! Everything purchased from the state by cooperatives is, first of all, purchased almost as though it is on the sly and, secondly, they purchase raw materials, other materials and equipment at prices which are 3-6 times higher than the prices paid by state enterprises. What are the new measures expected to do? What will the cooperatives sell at a loss to themselves? Once again, an attempt to suppress them, only by another means! Is it really not clear that there can be no discussion of an improvement in the cooperative movement in such a case? The question is then asked as to why there was any need to make such a fuss?

I cannot believe that all of this was done only in a thoughtless manner. No, the initiators of these measures were intelligent and competent people who possessed full knowledge of what they were doing. But it is not these absurd if not ill-intentioned attempts that are so alarming—in the final analysis, I believe that the central authority at one time banged its fist on the table and stated that it must not be! The most alarming factor is the hostile attitude of a considerable portion of the population towards cooperatives. Such general madness! We still are not aware of the simple truth: the market is always right. One can cry and curse as much as he wishes, but the result of any restrictive administrative measure is known in advance: goods disappear from the market and that is all. And if irritatingly high prices are established on the market—it indicates that something is amiss either in production itself or in the marketing of goods and thus an attempt must be made to increase the market supply and not place in prison the salesman whose goods are in demand and are willingly being purchased by the customers even at the “stinging” prices. But for increasing cooperative production and creating a truly keen competition among the producer-cooperators, and at the same time countering the excessively high market prices, there is only one method—stimulating cooperative production in every possible way by means of favorable conditions for supplying it with materials, favorable taxation and the elimination of all administrative hindrances with regard to the organization and expansion of cooperatives. This is all as old as the world, but unfortunately for us it is entirely new. Thus we must pay for our own ignorance: but how can this be done such that everything changes and nothing is sacrificed?

Is it offensive and enviable that the cooperators receive so much as a rule for their conscientious and inventive labor? Thus one cannot live or even dream of a better life if he preaches the principle: “it is better for my cow to die if it means that the neighbor will not have two of them.” At times, our policies appear to be oriented towards base human instincts! It is not that a cooperator should be suppressed, but rather the earnings of a plant worker should be raised to his level. Cheats? And where are they among us? I have heard nothing that would indicate Rashidov had cursed the ambos and areas. Yet a cry goes up concerning the cooperators—the time is at hand to plug up one's ears.

Today, no type of war—be it a tax, price or administrative-prohibitive war—is permissible with regard to the lease sector in the rural areas or cooperatives in the cities. Over a period of 60 years, we have either physically dislodged or morally suppressed almost everything that was bold, enterprising or inventive in our nation. Almost, but fortunately not everything. As it turned out, there are still desperate (and not always morally blameless) people who are prepared to accept the risk of a business initiative and who, although they glance back and entertain doubts, nevertheless retain their belief in the new times. Thus, do not suppress them, but rather let them take wing! The state will realize a gain (and gain a great deal) when they are truly allowed to organize their work. And the prices—the prices for cooperative products will decline of and by themselves when the cooperators commence competing seriously among themselves and when those state enterprises which converted over to cost accounting perform in a more rapid manner so as not to lose the market.

But today even these two sources are not sufficient for rapidly saturating the consumer market or for improving the situation which is visible to all and which could convince the “man on the street” of the need for and the inevitability of perestroika. In order to expand sharply the importing of consumer goods, we must display all of our ability, imagination and resourcefulness. There is an extreme need for this in view of today's (very painful) transitional period for perestroika, so that we will be able to hold out for the 4-5 years that are needed in order for the new economic mechanism and the new structure for ownership in the national economy to begin to produce a real return. According to my estimates, in order to realize a true improvement in the consumer market we must increase the importing of consumer goods by roughly 5 billion dollars worth annually during these 4-5 years.

Where is it possible to obtain these funds, when today we are barely able to make ends meet and when it appears that only this year will we succeed in achieving some equilibrium in our trade balance? Any individual familiar with our country's foreign-economic situation will tell you that these funds are not available. And he will be correct. But he will be correct upon one condition: if everything remains in the future just as it is at the



present time. But what will be the situation if thought is given to the matter, if imagination is displayed or if we proceed not along the well-trodden road but rather along new paths?

I do not have in mind merely the opportunities that are available for expanding our exports, although a noticeable improvement could be realized in them today if (assuming rejection of today's absolutely irrational exchange rate for the ruble) all state enterprises and all cooperatives were authorized to export their own products—either by themselves or through powerful intermediary associations. For example, why cannot our cooperators export frogs to France, or open a Russian restaurant in New York or Tokyo, or build several "five-star" super hotels in Moscow? Give them this opportunity and I am confident that the necessary people will be found and the work will prosper, provided of course that Minfin [Ministry of Finance] will not suppress such initiative. But even greater opportunities for increasing our currency reserves and for expanding the importing of consumer goods are available in still another area—in changing today's structure for our imports and in the utilization of international credit.

First of all, a need exists for a change in the import priorities. Why is it that the importing of industrial consumer goods, even during the best of times, does not rise higher than 5 percent of the country's total imports for firm currency, when it is known that such imports reach 1,000-1,500 percent at times for the state budget? From the standpoint of national economic balance and efficiency and the stability of our ruble, no explanation is forthcoming for this development. Not to mention moral considerations, with the state, despite obtaining such income from the consumer, continuing at the same time to restrict even the importing of medicines. For the state, there is nothing more advantageous or more profitable than the importing of consumer goods and it is useless to pretend that any such imports represent coercion of state interests or a forced concession to the whims of an irresponsible population.

What are we mainly importing at the present time? First of all, there is grain and meat, secondly, industrial equipment for new construction projects (mainly in heavy industry) and thirdly, raw materials, other materials, components and spare parts for active production operations. Obviously, large economies cannot be realized from the latter group—that which works must be operated. And what about the first two groups? For example, what about the grain for which today we are paying (without even counting the freight costs) 3-4 billion dollars annually? Some of our kolkhoz chairmen have advanced the following idea. Why does the state purchase grain from somewhere abroad for 120-140 dollars a ton? Give us a guarantee that all additional grain deliveries to the state in excess of the level let us say for 1988 will be paid to us in currency and that this currency will remain at our disposal. Within a period of 2-3 years, we will supply the country with the missing 30

million tons of grain and at a minimal price that will be one half lower than the international price. Some specialists consider this to be a wild thought. But what is wild about it? What is wild about it if we view it from the standpoint of the usual peasant common sense and are not guided by the numerous "prohibitions" which have persistently been forced upon us for a period of 60 years? Is this not really a true source for saving currency and one which will make it possible to solve by one half the problem of importing industrial consumer goods?

Or take the equipment for our industrial new construction projects. Today more than 5 billion rubles worth of this equipment is lying uninstalled throughout the country. It is rusting, becoming obsolete and subject to pilfering. And yet it is increasing in volume. Is it possible for this flow to be halted for the next 4-5 years? Is it possible to hold back on the more wasteful and more pompous construction projects, those which will provide an economic return only sometime in the remote future, to reject that which has not yet been ordered or paid for and to cease new construction in heavy industry? And the funds which are so released could be used for the direct importing of consumer goods and for modernizing those branches of our industry that are producing goods for which there is great demand.

And finally there is the subject of international credit. I have already expressed by opinion in this regard in the press and since that time I have not been persuaded differently by the arguments advanced by my opponents. Certainly, if we base our opinion upon the fact that we are eternally doomed for centuries to be exporters of only petroleum and gas and nothing else, then we will never "shine" and will be destined forever to sit on our gold supply and never be able to shorten our schedules for capital construction in industry from the recent figure of 11 years to the generally accepted international figure of 1.5-2 years (but indeed it has already been shortened to 8.5 years!) and thus there will not even be any thought of investment loans for us. As a result, the export products of our enterprises will never be competitive, nobody in the world will ever lend us serious money and we will forever remain outcasts from the international financial system - I will then truly talk fiddlesticks.

There is also the opinion expressed by one sober and serious individual, the well known American economist and recipient of the Nobel Peace Prize V. Leontyev (incidentally, one of the authors of the "Japanese miracle" model): "If your government accepts credit for goods, it will have many critics. But it is better for individual opponents to be criticized rather than large masses of people." And I can assure you that we did not reach an agreement! I can only add that in a private discussion with me he emphasized that: "Serious money is available throughout the world. Certainly, here we have in mind a private financial market and not governmental credits. And these credits will be furnished to you

if you honestly and openly present a specifically developed program for your import requirements for consumer goods. I have in mind total amounts quite possibly on the order of 30-40 billions of dollars."

What can be used for making payment at a later date? And this question is the same as asking whether or not we believe in the serious nature of our own intentions and in the need for realizing success in our perestroika, in the efficiency of the new system of stimuli created in the country and in the effectiveness of the new economic mechanism. We cannot limit ourselves to just one condition: if we secretly hold to the opinion that we are doomed to eternal vegetating, that we will never obtain anything, that never under any conditions will our products be accepted seriously on the world market and that an "open economy" is the path taken by the entire world but not by us.

The second central question concerned with the entire problem of economic balance is the normalization of our ruble—the structure and level for prices (wholesale, purchase and retail). At the same time, this is a most dangerous question from the standpoint of our country's social and political stability.

Today, in all probability, there are few who will negate the need for price reform. Without the establishment of objective and rational price proportions and in the absence of a conversion of the principal mass of our economy over to the market principles of price formation, the new economic mechanism will not work. However, the problem concerns what type of price reform we will have in actual practice. Meanwhile, the impression is such that neither the planning organs, the departments nor the scientist-economists have a clear notion today regarding the goals of the new reform and the realistic methods for carrying it out.

Ideally, what is it that we need? Ideally, two goals must be achieved prior to the impending price reform and the reform must pass through two stages during its implementation.

The first goal and the first stage—smoothing out the principal price proportions while bearing in mind the wholesale, purchase and retail prices. The second goal and second stage—reducing to a minimum the centralized interference in the price formation processes and a gradual transfer of the principal price-forming functions over to the market, that is, to the relationship between effective demand and supply. We are presently producing approximately 25 million types of products and accordingly we need the same number of prices. It is obvious that no central organ, regardless of the circumstances, is physically able to handle them. From an objective standpoint, another realistic solution, with the exception of market price formation (while retaining for a sufficiently long period of time centralized control over several dozens or hundreds of important prices) does not exist.

But today the first goal and the first stage in price reform are most important for our purposes—the establishment of objective proportions in prices which conform to the principal international proportions. One of the gravest consequences of the administrative-command system is the arbitrary deformation of practically all of the principal price ratios in the economy. As a result, we have artificially lowered prices for raw materials, fuel, food goods, transport, housing and perhaps, most importantly, for man-power and at the same time artificially inflated prices for machines, equipment and an entire range of industrial consumer goods. At the present time, our prices are often higher than the international prices by threefold or more. Today this constitutes a most important hindrance with regard to converting the economy over to the path for intensive and balanced development.

Indeed, one respected academician recently agreed that robots are only wasteful for us. Can it be that they are advantageous for the entire world but not for us? Why? Because, given our wage level, it is not surprising to note that we still have not moved away from the wheel.

Accordingly, in the ideal the essence of the initial stage of the price reform must first of all be the elimination of the scandalous price distortions. At the retail price level, this would signify roughly the following: to have in place of the present ratio of 2 rubles for a kilogram of meat, 50 rubles for a pair of decent men's boots, 700 rubles for a color television set and 8,000 rubles for an automobile, a more realistic ratio and one which is more in keeping with the true expenses and international trends—4-4.5 rubles for a kilogram of meat, 24-27 rubles for a pair of men's boots, 250-280 rubles for a color television set and 4,000 rubles for an automobile. One must soberly realize that so long as we fail to achieve such price ratios we will always live in an economically unreal world, in a type of "kingdom of distorting mirrors" where economically everything operates from the bottom upwards.

Will consumer demand change as a result of this structure? Yes, it will change. Meat consumption will decline and there will be an increase in the demand for boots and television sets. Will pensioners and generally lower paid layers of the population suffer as a result of this, individuals for whom the price of meat in daily life is more important than the price of boots and particularly television sets? They may suffer and particularly if during the course of such a reform the plans make no provision for appropriate compensation.

Secondly, it will be necessary to remove the state price subsidies and at the same time eliminate the turnover tax as a source for budgetary income. At such a time, the population's losses from the elimination of subsidies in subsidized prices will be compensated almost completely by the elimination of constant overpayments for goods upon which a turnover tax has been imposed. Today the state subsidies for the consumer and the turnover tax being added to the state budget are almost equal. Why

must we shift this money from one pocket to the other? First one and then the other—abnormal and economically incorrect. And if we wish to have a normal economy, we must reject this sad legacy from the past. I have in mind only the turnover tax on industrial goods and not the tax on alcoholic products and consumer goods. When restoring the normal situation with regard to the trade in state alcoholic products and a considerable expansion in consumer imports in just these two legal sources of state income, the state should be compensated for all price reform expenses, including compensation for pensioners and other low-wage layers of the population.

Certainly, this will by no means lead to an immediate and general elimination of the shortage in food goods. Moreover, it will undoubtedly intensify initially the shortages of industrial consumer goods on the market, with the amounts of the postponed demand and limited production capabilities of our industry, which produced goods for both short term and long term use, being taken into account. The lines waiting for clothing, furniture, television sets and automobiles will increase in length. But this situation can be helped by a substantial expansion in the importing of industrial consumer goods, with no reduction initially in the prices for them.

This entire inevitable payment will be for normalizing our economy and for the extended reign of the administrative-command system. For any mistakes, including historical ones, a payment must be made. And we will not succeed in avoiding this payment. At the same time, this will serve as an additional stimulus for the state in the sharp redistribution, finally, of capital investments in favor of the consumer branches of industry, for purchasing several powerful domestic equipment plants, for purchasing one or two more small automobile plants and others. Certainly, the period for converting over to normal price proportions will be a difficult one. But if the goal of the price reform will be precisely to normalize the economy and not primitive plundering of the population, the people will undoubtedly understand this. This will be especially true if certain signs for improving the situation in the consumer market make an appearance.

Thus the ideal is a difficult one. But it can be achieved. However, the present development of events is giving rise to the fear that the price reform is not only not achieving the goals needed by us but, to the contrary, it is only complicating the situation in our national economy.

The 19th Party Conference has once again confirmed the intention of the leadership to carry out the retail price reform in a manner so as to ensure that the population does not suffer. Great importance will undoubtedly be attached to the announcement by the leadership: everything added to the budget as a result of the liquidation of price subsidies will be returned fully by the state to the population by means of appropriate bonuses added on to wages and pensions.

However, even if this intention is realized, it will obviously be impossible to avoid serious harm to the population. It is known that Gosplan and Goskomsen [State Committee on Prices] are discussing only two questions: to what extent will the prices for the principal types of food goods be raised and what will be the amount of appropriate compensation. But nobody is discussing exactly what will happen on the day after the prices have been raised and compensation has been paid to the population.

But perhaps (and undoubtedly this will be the case) only one development will ensue: the next coil in the spiral of rising prices, which will immediately affect all other prices. The population, even in the face of honest compensation, will inevitably lose in the case of other prices which are not affected by a direct increase. Moreover, since appropriate compensation for savings bank deposits is not provided for, a sharp reduction immediately takes place in their real value.

Certainly, it is difficult at the present time, when the specific plans for the reform are being regarded as a profound secret, to make a judgment concerning the possible harm to the population. But there is reason to believe that even based upon the most generous variant for compensation, the damage to each worker and pensioner will be considerable. If we take into account the inevitable new coil in the price spiral and also a depreciation in savings bank deposits, then it will be impossible to avoid a substantial lowering of the country's standard of living.

Perestroyka cannot endure this. Gosplan and other departments, judging from all appearances, are continuing to operate from short-sighted redistribution positions. The essence of their work can be expressed roughly as follows: the holes in the budget will be closed for 3-4 years and grass will not grow there. And if complications of a social nature arise, we will not have to resolve them. Rather this will be a task for the MVD [Ministry of Internal Affairs] and the KGB [Committee for State Security].

We cannot ignore the fact that the mass of rank and file consumers are decisively opposed to an increase in prices and even discussions concerning a possible price reform tend to arouse ever-increasing irritation among them. And, unfortunately, there is a good basis for such irritation. All too often the rank and file consumers have been deceived through the carrying out of such reforms. They are asked to suddenly believe that a one-time increase in the prices for the principal food goods is in their best interests.

Many recall the reform of 1947, which was accompanied by direct confiscation of the population's savings, the 1962 increase in prices for meat and dairy products which was not compensated fully by a price reduction for industrial goods or subsequent and repeated increases in prices and rates for various goods and services, for which

not even explanations were given. The last action with "Berezka" did not strengthen trust in the state. Moreover, everyone is aware that "creeping inflation" is ever at work—an actual increase in prices when changing price tags is not being recorded in the statistics and the 2-3 percent interest being paid for savings bank deposits is by no means covering the "shrinking" of savings caused by this "de-facto" rise in the cost of living.

Social consciousness is sluggish and the government's reputation is today being influenced to a considerably greater extent by the experience of past abuses than by today's sincere intentions to have an end to these abuses once and for all. The trust of the population in the government is earned over a period of years and even decades and yet it can be lost perhaps in just one hour. And in recent years, unfortunately, nothing has happened in economics which could be viewed as raising trust in the state's economic policies: the lines continue to be just as long, the counters are empty just as in the past and the standard of living has not been raised.

In other words, under the situation which exists at the present time, the leadership has no real opportunity for "winning" the price "campaign." Regardless of how thorough the preparations are for raising the retail prices or the explanatory work that accompanies them and notwithstanding the compensation that the consumers receive, the majority are still not satisfied and credit for the new program will be seriously undermined. "Thus perestroika has brought about an increase in prices;" it is easy to predict that such an opinion will become typical and predominant following the reform in retail prices.

All is not as simple with regard to the reform in wholesale and purchase prices. We already have considerable experience in this area and this experience states that after a certain period of time following the increase, for example, in the purchase prices for agricultural products, the production expenses in agriculture increased and so once again agriculture brought in little profit and subsequently became unprofitable. At this point, it became necessary to raise the prices once again. A similar "profitability cycle" was observed in other raw material and power engineering branches: spasmodic growth in profitability as a result of a one-time increase in wholesale prices, thereafter a gradual and continuous reduction in profitability as a result of growth in production expenses and subsequently a need for a new increase in prices and so forth.

The reason for such a rotation is well known. The fact of the matter is that the greatest capability for a "twisting" of prices is possessed by those branches having a high production monopolization and a rapidly changing output nomenclature (machine building, light industry, construction and others). Here it is more difficult for Goskomtsen to check upon the soundness of the calculations presented by the producers. There are many new products and Goskomtsen stands alone in this respect. Thus

quite often we find "creeping inflation" in such branches—the productivity of a new machine tool or machine increases, for example, by 30 percent and its price—by several times. Unfortunately, collective egoism and ungentlemanly conduct are just as sad a factor with respect to our operations as is individual egoism.

On the other hand, in agriculture, the fuel industry and in other raw material branches, where there are few basic products and they are renewed only slowly, price control "from above" turns out to be relatively effective. Thus these branches periodically fall into the low profitability category: indeed the prices for the machines and equipment being purchased by them are constantly increasing, whereas the prices for the products produced by them remain stable for extended periods of time.

This is why the same thing happens in the "price arena" from one five-year plan to the next one—the prices for finished products and services advance while the prices for raw materials lag behind and, as a result, the raw material branches are periodically transformed into low profitability or even unprofitable operations and then it becomes necessary to carry out one-time large-scale price increases. It is not necessary to possess the gift of prophesy in order to be able to predict what will happen 5-10 years after the current "leveling off" of wholesale prices. The same thing that happened earlier will occur—the branch profitability levels will jump about in various directions the next time and once again it will become necessary to "level off" the prices.

Beyond any doubt, the reform in wholesale prices is needed as the first step and as the starting point. But it is unrealistic to await a radical improvement here until we have first adjusted the socialist market for means of production (wholesale trade), until we have destroyed the present monopoly of the producer or until we have improved socialist competition.

For agriculture, this implies that the present high production costs are the result not so much of poor farm operations but rather of price aggression on the part of the planning organs and industrial ministries—monopolistic suppliers of the equipment, fertilizer and construction materials needed in the rural areas. Are cows tethered to ropes because the production cost is high or is the production cost high because cows are tethered to ropes? Beyond any doubt, the former is the case. What type of successful work or reasonable production costs can we expect from a majority of the farms if up until now they have been forced to turn over slightly impure grain at a low price and later it is returned to them in the form of mixed feed at a price which is 2-3 times higher? What considerations were the appropriate departments guided by in 1988 when the prices for fertilizer were raised by a factor of 1.5-5 and those for wretched combines by threefold? And who was disturbed over the fact that all of these losses from prices were written off



for the kolkhozes and sovkhoses or will be covered by irrevocable credit? Charity—it is charity and it in no way relates to the production process.

It is here that we find the reasons for the "bad endlessness" in the spiral of food prices. And not having solved this problem and having failed to prevent this pumping of funds from rural areas through the price mechanism, we will achieve nothing through a simple increase in purchase prices and particularly that imposed upon the mass consumer. The benefit to the state from this pumping will be welcomed. No, this fuss and bustle would amount to nothing more than a senseless movement of money from one place to another.

Is there nevertheless a working alternative for today's plans for price reform—wholesale, purchasing and retail? I believe that there is.

It appears to me that an alternative variation must be based upon three principal prerequisites: first of all, a price reform is needed and inevitable; secondly, this must be not a one time act, but rather a gradual and rather slow process which begins with wholesale prices and ends with the retail prices; thirdly, the retail price reform must be carried out as the consumer market becomes saturated and not earlier than the signs of such saturation become obvious.

Today the state has a real opportunity, still without touching the retail prices, to rid itself of the principal portion of the food subsidies affecting the state budget. The entire sharp increase in state subsidies for food goods (from 20 billion to more than 60 billion rubles during the 1982-1987 period) was caused for the most part by one factor—the special increase in purchase prices for unprofitable and weak farms. The ridiculous nature of this measure was obvious: it turned out that those who worked well were paid very little, while those who worked in a clumsy manner were paid a great deal.

It is obvious that today the state can reject artificial support for unprofitable farms and also artificially inflated purchase prices for their products. At the present time, not more than 30 percent of the farms furnish approximately 80 percent of all of the country's agricultural output. And we must rely precisely upon those farms which do not require artificial state support and which presently require only one thing—freedom from an all-powerful administrative layer which tends to paralyze their arms and legs.

Weak and unpromising farms must receive assistance from the state in the form of their indebtedness being written off (a considerable portion of which did not result from fault on their part). Let them be merged, if possible, with stronger farms or let their lands be converted into parks or hunting establishments—the state should have no objection in this regard. The country's

guaranteed good fund is not dependent upon them. And it is even better if these farms are able to stand on their own two legs without the use of state crutches.

The opportunities for lowering the production costs for agricultural products are directly associated also with discontinuing the non-equivalent exchange through "scissors" in the prices for products purchased by the state on farms and for the mixed feed, fertilizer, equipment, construction materials, repairs and so forth sold to them. At the present time, everything that the state receives from such an equivalent exchange it gives back to unprofitable farms in the form of irrevocable credits. The abolishment of the principle of mandatory deliveries, authorization to store and process products on the farms and to sell them as needed and the conversion over from funded to cost accounting purchases of fertilizer and equipment must, beyond any doubt, improve the economic status of the kolkhozes and sovkhoses. The situation will also be aided by elimination of the currently outmoded administrative system in the rural areas which, according to some estimates, is devouring from one seventh to one eighth of the agricultural income.

Today we are also observing an opportunity for sharply reducing the production costs for agricultural products through the general development of collective and family lease arrangements. On a majority of the family farms, for example, the cost for producing pork is on the order of 70 kopecks to 1 ruble per kilogram and for beef—1.5-2.5 rubles. Meanwhile, we are only beginning to use this reserve for saturating the market. Experience reveals that quite often one family farm produces 5-10 times more output than the same number of people operating under the traditional conditions.

It is important to emphasize once again that with this alternative variation, the partial restoration of budgetary balance, which is being sought in a fair manner by Gosplan and our other departments, can be achieved if there is a substantial reduction in the wholesale prices for many of the products being supplied to the rural areas (for the budget, this will be compensated by a simultaneous cessation of irrevocable financing for unprofitable farms); a lowering of or stability in the purchase prices for agricultural products and finally, stability in the state retail prices for the principal types of food goods (subsidies from the budget for the difference between the purchase and retail prices will be compensated to the state by abolishment of the artificially high purchase prices for weak and poorly operating farms).

The acute nature of today's budgetary deficit problem certainly did not come about only as a result of the subsidies for food goods. But these subsidies constitute an important factor associated with the lack of budgetary balance and I am convinced that its effect can be reduced to a minimum without causing harm to the mass consumer.

It is believed that the reform in wholesale prices is at the most important stage as far as we are concerned. Its principal task—smoothing out the branch operating conditions for enterprises, ensuring a conversion over to stable tax relationships between the state and enterprises and the creation of prerequisites for partial convertibility of the ruble—this can be carried out for a period of time without infringing upon the retail price system. But the wholesale price reform must not evolve into a general increase in all prices: the increase in prices for fuel and raw materials must be steady and conform to a reduction in the inflated prices for machines and equipment.

Haste is not needed in the retail price reform. So long as we achieve an initial saturation of the market with food goods and industrial consumer goods, so long as we achieve partial restoration of budgetary balance and, finally, so long as we fail to enable people to earn as much as they wish to and are able to and not be restricted by administrative dictates from above—this action only undermines the people's trust in perestroika. In the final analysis, we cannot escape a retail price reform or a change in the ratios between the prices for food goods, housing, transport and industrial consumer goods. But at the present time we can and must only wait for this.

We have before us the positive experience of Hungary and the sharply negative experience of Poland in price reform. There is also the experience of China, where the reform in retail prices was resolved only after radical changes had been brought about in the saturation of the consumer market and where even in this instance it was carried out not in one hour but rather over a period of 5 years. Is the situation such that we can never learn anything from foreign experience? And are we really doomed to eternal improvisation, which is always followed by an inevitable and rather rapid hangover?

The third most important question upon which the creation of market equilibrium and a strengthening of the purchasing power of the ruble are dependent—normalization and development of our financial system. Its principal defects today are—first of all, the increasing (similar to a snowball) amount of money among the population which is not ensured either by goods or services; secondly, the undeveloped nature of our credit system and the availability of huge temporarily free monetary funds among enterprises and private persons who are in no way associated with the work; thirdly, the growing deficit of the state budget, which is already obviously approaching the 100 billion ruble mark and which is covered today by extremely unhealthy and dangerous methods—the printing press and secret and actual forced borrowing from the population through savings banks.

In other words, there is too much free money in the country at the present time and with each passing year this gigantic mountain of uninsured money only increases in its total amount. How can this danger be neutralized, how can this flow of money be halted and

how can this printing press be stopped? And again there is only one selection: either strength, confiscation of that which belongs to the people, or use of the ruble itself, normal and healthy methods for utilizing it, natural sources for increasing budgetary income and just as natural opportunities for reducing expenditures. In other words, that which the whole world knows and is capable of doing at the present time, but which we cannot do or which we do poorly.

Certainly, confiscation is possible in principle—but it is not our custom. Moreover, a great mind is not needed to do this. To share, to take from a neighbor, to smother the efforts of someone who worked well and who accumulated some wealth—this is unattractive work for us. Then there is still the question—who should be confiscated? At the present time, the average amount of deposit in a savings bank is approximately 1,500 rubles. Does this mean that we would be confiscating elderly people and the money that they put aside for burial? Or from those unfortunates who worked diligently at cooperatives in order to accumulate savings? From a worker, engineer, teacher or doctor who saved for an automobile through all of their lives and then died without ever having owned one? From a fisherman, a miner or a retired colonel? From a professor or from an artist whose work only now is beginning to be purchased.

Who among the rich in our country did not commit a sin by robbing, either directly or through a price reform, and without any compensation for monetary savings stored in a savings bank? Thieves? Yes, thieves. There are truly many among us. But it serves no end to exaggerate their importance. The amount of "stolen money" in the country at the present time amounts to more than 10 percent of all money available among the population. And does somebody know a method, a purely financial and not a police method, for removing the money from thieves without infringing upon the interests of honest people? And after such general confiscation has been carried out, what faith can people possible have in perestroika?

There are more than 280 billion rubles stored in savings banks at the present time. I do not believe anybody knows just how much money is being stored in "stockings" although experts have conjectured that this amount does not exceed 50 billion. Of the money stored in savings banks, "hot money" (that is, money which could be withdrawn at any moment when the goods for which this money is being held in waiting make an appearance) according to estimates, amounts to 60-70 billion rubles. What remains is viewed as being truly being savings. There is only one truly healthy path to be followed for the neutralization and sale or bartering of "hot money": growth in the state and cooperative production of high quality consumer goods, furniture, domestic equipment and electronics, in all types of services and also growth in imports. For the purpose of neutralization, moreover, and for the beneficial use of immobile money, use can and must be made of other

methods for achieving direct growth in production, methods which are purely financial by nature. And again, there is nothing here for us to acquire: everything was long ago acquired and is being employed extremely successfully throughout the world.

Construction materials for housing and summer cottage construction must be sold to the people and land must also be sold to them. In addition to motorcycles and small automobiles, they must also be able to purchase trucks, electric motors, tractors and many other needed items of agricultural equipment. The people and collectives must be able to purchase the stocks and bonds of industrial, agricultural-transport, trade, municipal and other enterprises. A funded exchange must be revived—this is a wonderful technical invention for bringing together those who need money and those who already have it. "What are you struggling for?" many will ask, "Stocks, dividends or rent? For shame!" But is it a shame to receive our usual 2-3 percent interest in a savings bank? And why is and for what socio-class reasons is the rent of one who lives on 2-3 percent annual interest better than the rent of one who lives on 6-8 percent interest? Do children and grandchildren lead a fast life on that which is left to them by their parents? Thus there is a solution here and nothing need be invented. An inheritance tax exists throughout the world and yet it should be such that parents are encouraged to squander more rapidly everything that they earned rather than leave it to their children.

Finally, our bankers and financiers must at some point or another come to understand that their chief obligation is not to discover who should be put down of those who have not yet been put down, but rather they should search for money everywhere and mobilize this money for the state needs. I fear that we will obtain nothing so long as those people who ensure state finances fail to understand a simple truth that is known to all and not to just us: in order to obtain a large amount of wool, it is by no means necessary to slay the sheep, but rather it needs only to be fed and clipped, and not just one sheep but the entire flock. Allow a craftsman and a cooperator to mature and retain a sense of measurement in their taxable clippings—a large volume of clippings will be obtained from them! And the more of them that there are, the greater will be their turnover and the more money will end up in the cashbox. Everyone including ourselves are indeed aware: the miserly and greedy individuals lose doubly so. And, for example, the more stern the conditions in such arch-income operations as insurance, the smaller the amount of money delivered to the cashbox in the final analysis. Why then should loans be taken out of savings bank, thus secretly increasing the state obligation? Issue openly and extensively long-term state loan obligations at 6-7 percent annual interest. Given our usual capital investment profitability on the order of 15 percent, will this be profitable for the state or not? The answer is obvious. But then there will be no need to conceal it from anyone and money will longer be stored in trunks.

In the interest of restoring balance to our budget, it is my opinion that a great amount of importance is being attached today not to eliminating the food and other subsidies nor, as already mentioned, to the fact that the state is spending that which it is receiving in the form of turnover tax through artificially inflated prices for industrial consumer goods. The greatest importance is being attached today to three budgetary problems: tax on alcoholic beverages, tax on imported consumer goods and excessive state expenditures.

I am convinced that we must have an end to the anti-alcohol campaign in its present form. There is already a saying among the people that this is a "second Afghanistan" and that we must also extricate ourselves from this war as rapidly as possible. This budgetary blood-letting (in which only a self-brewer emerges as the winner) has undermined even more the financial status of the country and it has further intensified the lack of balance in the market. We will take into account the fact that we have paid for science. The restoration of normal budgetary income from alcohol, an expansion in the importing of consumer goods and the abolishment of support through artificially high purchase prices for unprofitable farms in rural areas would furnish the budget with so much that all of the intentions of Gosplan and Goskomsen to once again suppress the consumer through a hasty reform of retail prices could not be justified. There would be more than enough in the budget for eliminating the present deficit without having to resort to a reform.

There is another aspect to this problem—unjustified budgetary expenditures. Reductions in or the total removal of such expenditures would be more than enough for eliminating the current deficit. Then there is defense, international obligations and the party, state and economic apparatus. There are also the legal protection organs and the penitentiary and prison system: we have several more times prisoners sitting behind bars than is the case in the U.S.A. and what kind of workers are they? Is a Soviet individual, by nature and behavior, more of a criminal than an American?

But this is not the whole story. The budget is searching for money and at the same time it is unquestioningly financing this same Minvudkhoz [Ministry of Land Reclamation and Water Resources], including its wages—16 billion rubles annually, that is, one sixth of the present deficit! Minenergo [Ministry of Power and Electrification] continues to require (and is receiving) money for the planning and construction of new hydroelectric power stations. It is interesting to note that somebody in our high economic leadership conceived the idea of building the Sayano-Shushenskiy GES [hydroelectric power station] and that work began on this project as early as 1962. Why is it that this project still has not been completed? How many times could the billions of rubles involved in this project been used over and over again during the period of time involved and how much money could have been turned over to the

budget? And was it only this one GES? And we continue to bewail the fact that no money is available. Yes money is available and a great deal of money. A need exists merely for learning how to count it! Thank God that a decision was finally handed down calling for the elimination of the tractor plant at Elabuga. Thus, the situation is not entirely a hopeless one for us and it appears that we can still count money. I would very much like to examine this fact as the beginning of a general normalization of the country's financial status. But it is difficult to shake off the impression that, based upon the present policy of those of our departments which are responsible for the country's financial status, such a normalization unfortunately is still a long way off in the future.

In my opinion, the fourth most important problem concerned with economic development and an indispensable condition for the creation of a single integrated market in the country—is the formation of a surplus of supply over demand and injury to a producer's monopoly in all areas of production and in the market and the development and encouragement for socialist competition. We have already taken the first steps in this direction. The state order for industry in 1989 already exceeds to a considerable degree 40 percent of all goods being produced. There will either have to be a complete rejection or the state order will have to be reduced to a minimum (mandatory deliveries) even in agriculture. Regardless of the difficulties involved, a real hope has appeared that during the first half of the 1990's 60-70 percent of the country's production resources will be sold freely through the wholesale trade or on the basis of direct agreements between the suppliers and consumers. But all of this is still insufficient for undermining the undivided authority of socialist monopolies in the market and none of this provides any guarantee against unrestrained inflation as a result of the prices being raised by the producers or against the low quality of their products.

I admit that I personally do not like any control over prices. But I am aware: that if at the present time, under the conditions of a high degree of monopolization of our industry, we eliminate Goskomtsen and turn over all price formation to the will of the direct producers (namely to them, since our consumers in all areas are still without rights and silent), we will achieve only a repetition of the memorable "market crisis" of 1923. The blind egoism of production collectives is a terrible thing and in the absence of centralized control over the principal and chief prices, our producers tend only under these conditions to inflate the prices for everything. Price control can be abolished only after we have created a "consumer market," that is, a stable and constant excess of supply over demand for all goods, in which a sharp and healthy competition becomes the norm and not the exception. When everyone is in competition: the state enterprises with other state enterprises, the private-cooperative sector with state production and craftsmen and cooperators among themselves. And all of them taken together—with stable and free imports, which is

the norm for any "open economy," that is, an economy that is not partitioned off from the external world neither by administrative barriers nor by closed irreversible currency nor by prohibitive customs tariffs.

If we succeed in achieving this over the next decade, it will be an eminent accomplishment and a true victory for perestroika and, it follows, the return of our economy to common sense and to its self-development and in the absence of any urging on or use of a whip. But it seems to me that we could take some important steps in this direction today without postponing any of the work until the 1990's. I have in mind first of all such measures which accompany market development as the preparation of "anti-trust legislation," which suppresses if not all then at least the most unceremonious attempts to achieve complete monopolization of the market and consumer constraint. I also have in mind the need, if only somewhat artificially and directed towards slowing down the monopolistic trends, for breaking up our more powerful associations into independent cost accounting enterprises engaged in producing the same products or providing the same services. For example, I believe that if Aeroflot had some competitors (let us say, republic competitors), the work would not be in as sorry a state as it is at the present time. There must be some type of additional impulse for the process of forming inter-branch associations, that is, to express it in still another way, freedom to move capital from one branch to another. And finally, I again return to the same thought expressed earlier: imports and still more imports. And the fifth (last by count, but by no means in terms of importance) condition for full value and effectiveness for our ruble—a true exchange rate for it and convertibility into all of the world's currencies. Some completely desperate voices are already proposing to take this step at the present time as the first stage for allowing enterprises to engage in the free purchasing and sale of foreign currency. I nevertheless believe that this is unrealistic at the present time.

In order to introduce even a partial convertibility of the ruble, that is, its convertibility for enterprises (but not for the "man on the street"), we must first of all complete the wholesale price reform and achieve the full development of the wholesale trade in the means of production. In the absence of a wholesale price reform, the task cannot be carried out if only because, given the present deformed price proportions, we cannot have a more or less trustworthy exchange rate for the ruble. As is known, its present exchange rate came about as a result of a resolute decision handed down by Stalin in 1950; using a blue pencil, he declared null and void the computation by specialists according to which 1 dollar equalled 14 rubles and instead of 14 he inserted the figure 4, while declaring at the same time that "this is enough for them." This blue pencil was later to become very costly to us. However, a fact remains a fact: although the present exchange rate for the ruble is unrealistic, we can define it as being more or less reliable only after we have restored order to the prices. Certainly, this will not be the



present 68 kopecks for a dollar, but I am confident that it will also not be the speculative 7.5 rubles for a dollar, the rate at which the ruble is almost officially being purchased and sold today, for example in West Berlin. Moreover, it is possible to foresee at the present time: the devalued ruble will make exports considerably more profitable for our enterprise-exporters and imports—much less profitable than they are at the present time

Another important condition—wholesale trade in the means of production—is needed for ensuring that the ruble becomes “internally convertible,” that is, any holder of a ruble, be it a domestic enterprise or a foreign partner, will be able at any moment to spend it in our country for anything that is needed. At the present time, this opportunity is not available to either the one or the other.

Certainly, in order to have a convertible ruble at least at the level of all-state accounts, reserves are needed for leveling off the inevitable fluctuations in the balance of payments. No miracle can be awaited here. And for us, just as for any other country in the world, these reserves can be obtained only from natural, so to speak, traditional sources: accelerated exports, a gold supply, maneuvering of obligations, direct foreign investments and international credit.

In this sense, it seems to me to be of basic importance for us finally to change our attitude towards the international currency-financial system and its institutes. If we are to play, then let us play “by the rules,” otherwise we may never learn and subsequently find ourselves in “proud isolation” in the world.

But if we can achieve convertibility of the ruble for the first half of the 1990's, then its complete convertibility, that is, convertibility for the “man in the street,” we should be able to realize, without deluding ourselves, prior to the end of the next decade. The reason is the same: complete convertibility of the ruble is impossible in the absence of realistic proportions in the retail prices, in other words, in the absence of a thorough retail price reform. At the present time, the status of perestroika is still too weak for us to risk endangering it by an imprudent move.

I assume that if we are discussing the overall climate in which perestroika is being carried out then we must recognize that it has two chief enemies at the present time: first of all, our general economic ignorance and, secondly, the blind and intensely deep rooted sense of envy among many if not a majority of us. But change must start somewhere. Either we will finally find the ability to soberly view things and ourselves or, as prophesied by P. Chaadayev, for centuries our fate will be that of serving to the whole world as an example of how it is not necessary to either think or act.

No, by no means is everything clear to us! For example, the following question is not even clear: what do we intend to do in the future with such a powerful force for economic progress as individualism, the desire of an enterprising and energetic personality to achieve personal success, including material success? As is known, the movement of history through the ages has been based upon two forces—collectivism and individualism. The force of collectivism, although with the coefficient of efficiency it is no higher than Stevenson's steamengine, we have still somehow mastered it or are mastering it. And what about the individual desire for success? Or how could history proceed while hobbling along on one leg? And is it permissible for us to ask if we are proceeding in the same manner?

Think, dear fellow countrymen! Think! History has provided us with a unique chance to think out our lives anew. As we know, Lenin thought a great deal about such things. And the phenomenal success of NEP [New Economic Policy (1921-1936)] underscored the fact that this was an extremely fruitful undertaking. It found a model which enabled us, during the 1920's, to advance through life on two legs and not just on one. And in terms of any international criteria, this was an effective and competitive model! And of equal importance—a socialist model!

I can imagine the fury aroused in many over the mere posing of this question. But as one ill-starred literary hero stated: “Que faire?” as they say in French. In other words, what is there to do fellow citizens? Is there something that can be done? I am aware that there are few at the present time who are willing to answer this question, or even to think about it. But I fear that we cannot escape answering it. All of us together must answer it.

## PLANNING, PLAN IMPLEMENTATION

**Investment Policy for Next 5-Year Plan Discussed**  
18200295 Moscow *PLANOVOYE KHOZYAYSTVO*  
in Russian No 3, Mar 89 pp 23-32

[Article by O. Ilin, doctor of economic sciences: “The Basis of the Relationship Between State Centralized Capital Investments and Capital Investments Which Have Not Been Centralized”]

[Text] The basic principles underlying formation of the relationship between state centralized capital investments (financed from the budget) and capital investments which have not been centralized (financed out of the cost-accounting (*khozraschetnyye*) funds of enterprises) essentially predetermine the degree of decentralization of planning in this area and also of management of reproduction of fixed capital and production capacities. The establishment (optimization) of this relationship in the 13th FYP must be in full conformity with the USSR Law on the State Enterprise (Association) and the principles of radical restructuring of management of the

economy. It is important in this connection to take into account the early experience in enterprises' operation in the context of full cost accounting and self-financing.

#### **State Centralized and Decentralized Capital Investments in the Planned Development of the Economy**

A process of economic recovery has begun in the country thanks to implementation of the measures outlined by the 27th CPSU Congress and the 19th CPSU Conference, new methods of economic activity are gaining strength, and the management system is undergoing reorganization. The rate of structural revamping of the economy and the rate of development of scientific-technical progress will be speeding up considerably in the very near future, resource conservation will be tightened, and product quality will improve. The strain in supplying food, consumer goods, and housing to the population and the unsatisfied demand for services have to be eliminated.

It would seem that these problems can be solved only by using an effective means like **centralized structural and investment policy**. Directed above all toward overcoming existing trends, it must not come into contradiction with the economic independence of enterprises. Those economic conditions have to be brought about and the cost-accounting motivation of work collectives created so that the transition to self-financing and expansion of the investment capabilities of enterprises would in turn favor establishment of less capital-intensive proportions within branches and within production enterprises and an increase in the output of goods indispensable to the economy.

Centralized investment policy is becoming more important under present conditions. The reason for this is that the development of commodity-money relations and wholesale trade in means of production, the implementation of preferential measures to stimulate redistribution of capital investments among sectors and production groupings, cannot accomplish radical structural changes. Yet they have to be accomplished at both the macroeconomic and microeconomic levels at rather moderate growth rates of capital investments in production. The technological balance of the economy has to be restored, and the technical and technological lag of certain subdivisions of the economy made up. Raising the technical level of machines and equipment will make it possible to make investment decisions that save capital and thereby make resources available to develop the economy in the direction of consumption, to redistribute resources for creation of up-to-date enterprises specialized in the production of consumer goods.

**The central planning of investments to develop the country's economy and to achieve expanded reproduction in all segments of the economy will be aimed along two inter-related lines:**

- **direct use of state centralized capital investments to carry out national economic programs and major**

measures in the social, ecological, and scientific-technical areas, accompanied by the conduct of structural, regional, and foreign economic policy;

- **by exerting an influence so that enterprises and organizations use economic methods in arriving at investment decisions** (establishment of standard rates of formation of funds for development of production, science, and technology, establishment of financial conditions and credit terms and conditions, and regulation of prices and remuneration of labor).

An important proportion like the ratio between construction of production facilities and nonproduction facilities should still be determined as an element of centralized planning of economic and social development. It essentially predetermines the volume of housing construction and the rate of development of health care and the sphere of social and cultural services.

**The main purpose of state centralized capital investments is to develop new branches and regions and to build capacities that have strategic importance.** These resources can also be used for radical reconstruction of certain enterprises of the greatest importance. **Work collectives of enterprises use their own and borrowed resources to achieve not only simple, but also expanded reproduction on the basis of technical reconstruction.** Thus, the efforts of enterprises are concentrated on development of existing production, and those of the state on carrying out new construction.

At the same time, it would be incorrect to see only state centralized capital investments as a means of realizing the interests of the economy. A portion of the resources of enterprises accumulated by ministries and departments and also deductions to local budgets are also used for that purpose. They go to finance production operations of sectoral importance and for cooperation with other interested ministries and departments—interbranch production operations. These resources are also committed to the expansion and reconstruction of enterprises, which guarantees elimination of bottlenecks and disproportions and maintains the balanced development of related production operations. Regional agencies are now experiencing an increase in their role and expansion of their economic independence in managing the socioeconomic development of regions. They must in essence take over responsibility for the joining and coordinating of efforts of enterprises located in their jurisdiction to improve the production infrastructure and social infrastructure and to protect the environment. Commitment to these objectives of a portion of the resources accumulated in the local budget from the deductions of enterprises will help to perform the tasks of the national economy and the functions of centralized investment policy to develop the social sphere and solve housing problems.

Thus, in addition to funds allocated directly from the center, a portion of capital investments planned by

USSR ministries and departments and councils of ministers of union republics will also be used to manage the structural reconstruction of the economy in the sphere of centralized distribution of investments.

In the first stage of carrying out the radical reform, the relation between centralized and decentralized capital investments did not fully meet the requirements of the USSR Law on the State Enterprise (Association). This discrepancy has to be eliminated in the 13th FYP and proportional and balanced development of the economy guaranteed.

#### **The Basic Principles Governing Formation of the Relationship Between Centralized and Decentralized Capital Investments**

The material of the June (1987) Plenum of the CPSU Central Committee pointed up the importance of setting priorities and defining directions of structural and investment policy (this is one of the main functions of centralized planning). The relationship between centralized and decentralized capital investments is formed on the basis of the priorities and directions that are chosen. The following principles are used in this work.

**Achievement of the optimum relation between centralized and decentralized capital investments is necessary in order to combine the interests of the national economy with the cost-accounting interests of enterprises.** Two approaches to implementation of that principle are being proposed. According to the first, it is necessary to strictly determine not only the total volume of state capital investments, but also the volume of state centralized capital investments, and everything else would be financed from the resources of enterprise funds. In the second approach, the proposals of enterprises would be taken as the basis, and the difference would be covered with budget resources. In our view, neither approach takes collective interests and the interests of the entire people fully into account. That is done to a greater degree if the ratio is revised from stage to stage in the course of drafting the plan.

**The ratio between centralized and decentralized capital investments must be differentiated from one complex or sector of the national economy to another.** The reason why this principle is applied is that if all sectors have the same share of the limit-allowance of centralized capital investments in the total volume of state capital investments, it is not possible to take into account the peculiarities of implementation of structural policy and of reproduction of fixed capital in a particular sector. Of course, if we leave aside the specific situation and a number of other factors, in connection with large-scale reconstruction and expansion the uniform share places enterprises of different sectors in the same conditions for being furnished state centralized capital investments. What is more, this approach does not fully correspond to the requirements of the USSR Law on the State Enterprise (Association): in some cases reconstruction projects

are financed from state centralized capital investments without adequate substantiation, while in others new construction is not financed from the budget when enterprises do not have sufficient resources for it.

The differentiation of the ratio between centralized and decentralized capital investments must fully take into account the peculiar features of reproduction of fixed capital in the sectors of the economy involved, and under these conditions the proportions in reproduction will serve as the general methodological basis for forming this ratio. At the same time, it has to be born in mind that a substantial rise in the relative share of retooling and reconstruction when a high relative share of "own" funds is being used for these purposes could diminish the capabilities of enterprises to undergo major structural revamping of production on the basis of new technology, especially in sectors with a high rate of scientific-technical progress. That is why when plans are drafted, state centralized capital investments have to be set aside for those purposes for branches involved in the application of scientific-technical progress to the economy, should enterprises lack the resources necessary for those purposes.

**The limit-allowances of state centralized capital investments must become stable in nature once the 5-year plan has been worked up and approved.** Their unchangeability during the 5-year period is one of the forms of guarantees of enterprise independence in connection with revision of annual plans for capital construction on the basis of the assignments of the 5-year plan. This also creates the basis for expanding the independence of work collectives in seeking out resources for development of their own enterprises, since the realization of additional profit (cost-accounting income) requires an exploration of alternatives for augmenting production capabilities, with exclusive orientation toward their own resources.

**Formation of the ratio between centralized and decentralized capital investments must be directly linked to changes in the practice of supplying credit to finance capital investments.** The proposals now being made to the effect that all centralized capital investments must be financed with long-term credits furnished by the customer are hardly justified. Their implementation could generate a contradiction between the right to make decisions about commencement of construction (the center) and decisions about the advisability of issuing credit (made by the agencies doing the financing). Should those rights be granted to the banks, then the decisions would not always correspond as they should to the interests of the national economy in the conduct of structural policy. The credit financing of new construction through the ministry, with subsequent repayment of credit from the profit of the newly created enterprise, given the high protection of work collectives as to social welfare, will hardly increase the responsibility and reduce the demands of clients to obtain resources for financing centralized capital investments. At the same time, it would be advisable to extend the practice of

credit financing of capital investments above all to large-scale expansion and reconstruction of existing enterprises (except for production operations being built in accordance with a state order), and also experimental, pilot, and special-purpose facilities and those that do not involve series production of a product. In future, it will evidently be possible to make the conversion to credit financing of even a portion of new construction, above all in the case of enterprises with a short pay-off period and those which are highly profitable.

**The forms of distribution of material and technical resources must correspond to the centralized and decentralized capital investments.** It makes sense in the years immediately ahead for state centralized capital investments to be furnished in the form of centralized deliveries of material and technical resources, while decentralized investments would be accomplished through wholesale trade. Later, centralized deliveries would cover only that portion of state centralized capital investments which is going to develop capacities to cover the state order.

As for the material and technical base of the construction complex, its development should be rather rigidly brought into conformity with the total growth of the volume of centralized and decentralized capital investments. That is why the ratio between them should be linked to the planning of the development of capacities of construction and installation organizations. It is advisable that in the coming period the volume of the state order assigned to construction and installation organizations not exceed (be equal to) the limit-allowance of state centralized capital investments, while other construction and installation work would be done on the basis of conclusion of direct contracts. Afterward, apparently, the state order assigned to construction and installation organizations has to be reduced to those proportions that correspond to the volume of state centralized capital investments required to cover the state order for activation of production capacities.

#### **Procedure for Forming the Ratio Between Centralized and Decentralized Capital Investments**

The following types of work should be financed with state centralized capital investments:

- construction of new enterprises, buildings, and installations on separate sites according to the originally prepared project plans and estimates and second and subsequent stages and subsidiaries of existing enterprises being built according to separate project plans;
- construction of residential buildings and other facilities for nonproduction purposes envisaged by advance estimates (cost summaries) necessary for activation and normal operation of new enterprises and installations to be activated;
- large-scale reconstruction or expansion of enterprises related to the passage into production of a fundamentally new product or a substantial increase in the

volume of a product already produced (including products which have intersector importance) and the creation of large additional production capacities for those purposes in those cases when the estimated cost of the work exceeds the enterprise's own financial capabilities as well as the capabilities for financing this work when funds are enlisted from the centralized fund for development of production, science, and technology of the ministry for completion of construction within the standard time allowed (or within the time stated in the project plan for the organization of construction). The factor by which the value of the enterprise's fixed capital will increase after the work of reconstruction and expansion of production is done might specifically be taken as the criterion for inclusion of such projects among those to be financed out of the state budget;

- construction of residential buildings and other projects for nonproduction purposes necessary to cover the growth of the labor force and associated with activation (growth) of additional capacities when resources in the fund for social welfare and cultural programs and housing construction are insufficient;
- construction, reconstruction, and expansion of projects that are part of intersector scientific-technical complexes, head scientific research organizations of entire sectors which do not form economic incentive funds, and also sectorwide pilot plants and facilities envisaged in comprehensive programs for scientific-technical progress;
- construction and expansion of all-union higher and secondary specialized educational institutions and their laboratory facilities, and also special educational institutions in accordance with decisions which the government has made;
- construction and reconstruction of detached civil defense projects and other special-purpose projects at existing enterprises for whose construction a separate project plan is prepared;
- acquisition of equipment not included in cost estimates of construction projects (rolling stock for the Ministry of Railways, maritime and river vessels, etc.), on a list cleared with USSR Gosplan.

It is advisable to form the ratio between centralized and decentralized capital investments in three stages. **In the first**—in the process of preparing the reference figures pertaining to the Basic Directions for Economic and Social Development of the USSR—methodological approaches to substantiating it are outlined. This ratio may be defined on the basis of material from sector development schemes and reproductive peculiarities in development of the complexes and sectors of the economy during the 13th FYP.

**In the second stage**—during preparation of the draft of the Basic Directions—preliminary proposals are framed concerning the volume of centralized and decentralized capital investments. In accordance with the new economic conditions, work collectives of leading enterprises, associations, NPO's, and institutes are involved



in the effort in this stage. This will make it possible to draw up a list of projects representing large-scale reconstruction and expansion. The volume of resources to be allocated for new construction in the planning period is calculated on the basis of the reproductive structure of capital investments, and the resources to carry out large-scale reconstruction and expansion to be financed from the state budget is calculated from the list. When these volumes are added together, preliminary proposals are made concerning the limit-allowances of state centralized capital investments for construction of production facilities.

Limit-allowances of state centralized capital investments for development of the nonproduction sphere are formed on the basis of the fundamental position concerning coordinated development of the production sphere and the social sphere and the entire infrastructure. Accordingly, when USSR ministries and departments and councils of ministers of union republics draw up lists of enterprises and projects which are planned for construction with financing from state centralized capital investments, they must at the same time envisage allocation of earmarked resources for creation and development of the social sphere in accordance with the established standard ratios.

The preliminary proposals as to limit-allowances of state centralized capital investments and the state order and also the list of the most important projects, submitted to USSR Gosplan as computational material, are examined and revised. After that, they are used as initial data for 5-year planning which ministries and departments break down to the level of enterprises (associations) as preliminary limit-allowances of state centralized capital investments and state orders related to activation of production capacities.

Formation of the ratio between centralized and decentralized capital investments is completed in the **third stage**—in the process of drafting the 5-year plan with the active participation of all levels of management (enterprises, USSR ministries and departments, and USSR Gosplan). This work begins right at enterprises, which, in possession of the preliminary limit-allowances and taking into account the size of cost-accounting funds which are planned (this is determined with the help of the standard rates that have been made known to them) prepare proposals for the volume of centralized and decentralized capital investments and for activation of production capacities on the basis of the tasks involved in achieving the cost-accounting income (profit) they have envisaged in the plan. USSR ministries and departments examine these proposals from the standpoint of performance of the tasks of the entire sector and the possibilities for financing the development of subordinate enterprises with the resources built up at the given level.

The final formation of the ratio between centralized and decentralized capital investments occurs during USSR Gosplan's examination of the proposals of ministries

and departments. In this stage, the lists of projects proposed for construction in the planning period with financing from state centralized capital investments are the basis for establishing the limit-allowances of centralized capital investments and state orders for activation of production capacity. Once the plan is approved, they are broken down to ministries and departments, and the latter in turn break them down to enterprises (associations), which take this into account when they independently adopt their own 5-year plans.

Thus, the ratio between centralized and decentralized capital investments is optimized on a democratic basis through successive refinement in the process of working out the plan for both the share of state centralized capital investments committed to performing the most important tasks of the national economy and to formation of progressive proportions and structural shifts in the national economic complex, and also the share of decentralized capital investments covering development and realization of the cost-accounting interests of individual enterprises.

#### **Particular Features of Formation of the Ratio Between Centralized and Decentralized Capital Investments in the 13th FYP**

The 12th FYP envisaged the transition to shaping proportions of a new type in reproduction. The essence of it is priority financing for development of existing enterprises, with reliance on their own resources. State capital investments for production projects in the period 1986-1990 will grow 34 percent, including a growth of 70 percent for investments in existing production and a growth of only 13.8 percent (or one-fifth as much) for investments in new construction. Moreover, within existing production there is a sharp increase in the use of resources from the development fund (2.3-fold). The share of these resources in retooling and reconstruction is to increase from 28.3 percent in the last FYP to 41.8 percent in this one.

In 1989, when the transition of enterprises to the new economic conditions will for all practical purposes be completed, the ratio between centralized and decentralized capital investments will reflect rather accurately the requirements of the USSR Law on the State Enterprise (Association). In the plan approved for the current year, the share of state centralized capital investments will be 52.9 percent of the total and decentralized investments 41.7 percent, including shares of 49.7 and 50.3 percent, respectively, for investments in the production sphere. State centralized capital investments are to be used to carry out 90.3 percent of the new construction, 54.6 percent of the expansion, 54.6 percent of the reconstruction, and only 10.1 percent of the retooling.

It is evident from the figures given in the table that state centralized capital investments have the highest share in the fuel and energy complex (57.8 percent), while in

other complexes it will range from 41.3 to 44 percent. As for retooling, reconstruction, and expansion of enterprises, the use of state centralized resources for these purposes varies widely: from 20.7 percent in the fuel and energy complex to almost 50 percent in the transportation and

communications complex. But still enterprises are setting aside more of their own resources for these purposes (especially in the wood chemical complex—70 percent, the metallurgical complex—70.6 percent, and the fuel and energy complex—79.3 percent).

**State Capital Investments in Construction of Production Facilities in the National Economic Complexes in 1989, in billions of rubles**

National Economic Complex	Total	Breakdown			
		Absolute Figure	Share, in percentage	Decentralized Absolute Figure	Share, in percentage
Fuel and energy	32.66/8.21	18.88/1.70	57.8/20.7	13.78/6.51	42.2/79.3
Metallurgy	6.61/4.9	2.73/1.44	41.3/29.4	3.88/3.46	58.7/70.6
Wood chemical	8.53/7.04	3.17/2.11	37.3/30	5.35/4.93	62.7/70
Machinebuilding	11.1/8.7	4.7/2.8	42.3/32.2	6.4/5.9	57.7/67.8
Transportation and communications	14.3/6.63	6.1/3.28	42.7/49.5	8.2/3.35	57.3/50.5
Agroindustrial	30/25.7	13.2/11.6	44/45.1	16.8/14.1	56/54.9

Note: The numerator contains all capital investments, and the denominator those for retooling, reconstruction, and expansion.

The effort to form proportions of a new type in reproduction will continue in the 13th FYP. Changes in these proportions will be related above all to further redistribution of investments to the advantage of the consumer sector of the economy in order to provide the public a fuller supply of food, industrial goods and services, housing, and development of health care and education. Performance of these tasks requires a substantial rise in the efficiency of capital investments and a further expansion of intensive forms of reproduction within the branches of industry.

In certain national economic complexes and sectors, the change of the proportions will depend largely on the particular features of their development that have been planned. For instance, in the fuel and energy complex, the adoption of new wholesale prices will provide a real possibility for increasing the share of resources of enterprise funds in financing a larger volume of work in their reconstruction and expansion. At the same time, taking into account the capital intensiveness of new construction of nuclear power plants, which is high, approximately at the level of the last years of the current 5-year planning period, the share of centralized capital investments may remain rather high in that industry.

In the coal industry, the change in the ratio between centralized and decentralized capital investments will be related to a certain increase in the share of large-scale reconstruction. In ferrous and nonferrous metallurgy, in accordance with the volume of new construction, large-scale expansion, and reconstruction envisaged in sector plans, the share of centralized capital investments will decrease somewhat.

In the chemical industry, the ratio between centralized and decentralized capital investments will obviously be determined in large part by the creation of complexes using hydrocarbon raw materials and by particular features in performance of the program to chemicalize the economy, which requires corresponding centralized capital investments. In the machinebuilding complex, this ratio will depend largely on the growth of production capacities thanks to intensive forms of reproduction financed from enterprises' own resources. In the transportation and communications complex, a certain increase in attraction of funds from the budget will be predetermined by the growth of road construction, in the Nonchernozem Zone in particular. In agriculture, acceleration of the development of processing capacities and bringing new enterprises closer to points of production could bring about an increase in the share of state centralized capital investments. At the same time, it would be advisable if a portion of these new construction projects were financed with resources of kolkhozes and sovkhozes themselves. Greater care should be taken to orient irrigation and drainage construction toward financing from the resources of kolkhozes and sovkhozes.

In the national economy as a whole, according to estimates, state centralized capital investments to be committed to solving structural problems in the 13th FYP could represent about half of the total volume of state capital investments. It has to be taken into account here that a portion of the resources of ministries and departments in the form of centralized funds and reserves is essentially being committed to projects organically related to the interests of the entire nation (for development of intersector production operations, to achieve

intrasector balance, and to eliminate bottlenecks and disproportions). Commitment of a portion of decentralized capital investments to development of the nonproduction sphere pursues much the same purpose. Thus, in the 13th FYP almost two-thirds of the volume of state capital investments will be used directly to carry out the unified structural policy of the national economy.

At the same time, in our opinion, economic independence in use of the remainder of capital investments must also not escape the attention of the centralized management. Without question, action here must fully correspond to the requirements of the law on the enterprise and must be based on economic methods that guarantee the cost-accounting motivation of enterprises and organizations.

The economic motivation of enterprises to build production capacities that have been covered by their proposals in the 5-year plan is not being fully manifested at the present time. There are a number of reasons for this, in particular the lack of their own financial resources; shortcomings in stimulating the development of production capacities for production of products indispensable to the economy; late preparation or late review of outdated project plans; limited opportunities for obtaining progressive and highly productive equipment; late or incomplete deliveries of that equipment; and difficulties in letting the contract for construction and installation work.

Solving this problem requires comprehensive and many-sided measures, among which the following can be singled out.

It evidently makes sense in the first years of the 13th FYP to retain the practice of forming state orders according to proposals of enterprises and organizations for activation of production capacities and for performance of construction and installation work that would be financed with resources from enterprise funds along with centralized supply of the necessary material and technical resources.

Commitment of resources of enterprises to development of priority sector and production operations should be envisaged even in the stage of setting the standard economic rates, since they are helpful in affording greater opportunities to build up "own" resources in precisely those sectors. The standard rates of deductions to be made from profit or cost-accounting income for the budget, the charge on assets, the rates of depreciation deductions, and interest rates on credits should be differentiated to that same end. Development of wholesale trade must help to reduce shortages of material and technical resources, and reduction of the share of the state order for construction and installation work must help to expand opportunities for conclusion of contracts for construction work.

Improving the quality and authenticity of counterplans for capital construction to be financed from the funds for development of production, science, and technology and the resources for social development drafted by enterprises must help in establishing the proper supervision over progress in carrying out the capital construction program and over creation of production capacities.

In future, as enterprises build up resources, it will in all probability be necessary for those resources to undergo intersector redistribution. That would require active involvement of the banks, which by means of differentiated interest rates must motivate enterprises to use their available resources in those directions that are necessary from the standpoint of the established priorities. Enterprises should in this connection be granted the right to invest their funds directly in development of related production operations. Those resources could be repaid to the investor enterprise in the form of finished products at negotiated prices or in the form of deductions from the fund for development of production of the enterprise using the investments.

It would also be advisable to organize a study of foreign experience in state regulation of the investment process, of the formation of tax policy and depreciation policy, of the credit-and-finance mechanism for intersector siphoning of capital, of methods of regulating the investment process at the level of firms by means of a flexible tax base, depreciation rates defined as intervals, and the siphoning of capital through the purchase and sale of stock.

Thus, the planning of state centralized capital investments, combined with central management of redistribution of decentralized capital investments on the basis of economic methods, must guarantee fully the implementation of structural policy and investment policy.

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#### **Roundtable Discussion on Planning Problems at Enterprise Level**

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in Russian No 2, Feb 89 pp 19-28*

[Unsigned article: "Planning at the Enterprise: Roundtable Meeting of Economic Managers"]

[Text] In accordance with the economic reform, planning at the enterprises is a component part of the planning system. It is envisaged that enterprises and associations will independently develop and approve their own five-year plans based on control figures, state orders, and economic norms and limits, and also on direct orders from customers and from material and technical supply organs. The most important task is to ensure that the five-year plans are oriented toward cutting costs. How this is being realized and the kinds of problems that are being encountered by labor collectives

and management at the enterprises was the subject of discussions at a "roundtable" meeting of enterprise directors and specialists, held in Leningrad at the initiative of this journal.

S.S. Gubanov (departmental editor at the journal *PLANOVOYE KHOZYAYSTVO*): In connection with restructuring of the functions and work content of planning organs, particular significance attaches to the question of the optimal combination of planning at the enterprises with centralized planning. Today, I would like to hear how such a combination is being assured at machine building enterprises within the region, what kinds of problems have been solved here, and whether it has been possible to get away from the pressure of cost indicators and to reorient plans toward modernizing the output of machine building, improving its quality, and accelerating scientific and technical progress.

V.A. Murinas (deputy general director for economics at the Elektrosila economic LPEO [expansion not given]): The primary goal, for the sake of which restructuring of the planning system is being carried out, still has not been achieved. Very frankly, it must be acknowledged that we have not been successful in escaping from the pursuit of higher [production] rates and that, in a number of cases, this pursuit has even intensified. The approach that "cost-is-no-object" also continues to persist. The first thing that managers are asked about and the first thing for which they held accountable, if targets are not achieved, concerns volumes of commodity production and the rates of its growth. In this regard, practically nothing has changed on the level of the sectors. The rayon party committees have been restructured to a certain degree. Now, they are devoting their main attention to the fulfillment of contracts for the delivery of products, and they have become much more demanding this regard. The Ministry is demanding production volumes, while the party organs are demanding that contract discipline be observed.

Yu. P. Arkhipov (party committee secretary at the Izhorskiy Zavod production association): Let us take a look at what changes have been made in planning tools themselves. Control figures, state orders, and limits and norms are being used by the planning organs in working with the enterprises and by the enterprises themselves when preparing their production plans, i.e., there has been a change in form, but the content has remained essentially as before. Value cost [stoimostnyye zatratnyye] indicators have retained their primary role, and the enterprises, albeit with new kinds of tools, are oriented as formerly toward increasing the value of output, inasmuch as their economic and financial well-being depend upon volumes of commodity production.

V.A. Murinas: Incidentally, in this regard, there is no appreciable distinction between norms for the first and second economic accountability models. Both of them push enterprises in the direction of increasing prices, not only for the sake of increasing earnings, as is frequently

assumed, but also so that commodity output volume increase as well. The higher the prices, the greater production output per worker is considered to be, and consequently the higher the productivity of labor.

Question: Don't you think that this is a reflection of the direct dependence of a value expression of labor "productivity" upon prices?

Yu. P. Arkhipov: Of course. With an increase in prices there is also an increase in the productivity of labor. Such a dependence is harmful for the economy, but we still have not succeeded in overcoming it. From this, there is a constant temptation to solve problems by means of raising prices. This is only an illusion of achieving positive results, and in fact is self-deception. After a certain period of time, precisely the same problem appears again, with new strength. Inflated prices also lead to artificially inflated growth rates for the commodity production that is achieved. They begin to serve as a basis within the process of developing plans. They cannot be reduced. Thus, artificially inflated rates come to be recognized as the socially necessary ones; they are, as it were, legalized. Then, calculations begin using them as a basis. Growth rates in relationship to them are made the basis of new plans. And once former rates have been achieved thanks to an increase in prices, then nothing remains but, by the same route, to achieve new rates of growth.

V.A. Murinas: Even the banks are raising the charge for their services: They have increased it to 68 kopecks for every thousand rubles transferred and are trying by this to increase their volume of banking services, although they have no real product and this is simply a redistribution of monetary funds to the benefit of the banking system.

Yu. P. Arkhipov: Yes, we somehow overlooked the moment when prices were transformed, in essence, into a means of supporting rates of economic growth. Now this transformation has taken place and is causing a mass of problems in our economy, in its development.

B.I. Olerinskiy (deputy general director of the LenNI-Ikhimmash scientific production organization): Under present circumstances, especially when a producer has a monopoly, enterprises are taking the path of least resistance. Why reduce expenses when it is possible to increase prices? In order to reduce costs it is necessary to modernize production, to improve technology, to reorganize the organization of labor, to think about how to interest people in achieving high final results. The job is a large and complicated one, one which demands not only material and technical conditions, but also the deep individual conscientiousness of the workers. It is now rare to find anyone who will venture to take such a path. It is much easier to raise prices than to reduce costs. In this way, by the wave of a hand, an enterprise gets its



required "results." But society does not get any real benefit from them. What it gets is plan fulfillment that is based on inflated growth rates of production volume expressed in value terms.

Question: But are there any economic levers to counter inflation of prices, besides the administrative ones stipulated by the Law on the State Enterprise?

B.I. Olerinskiy: Economic methods that hinder price inflation are simply unknown to us, the economic managers and planners. Perhaps there are such somewhere, but we do not have them.

Yu. P. Arkhipov: In general, this is right, although there is one other factor—the conscientiousness of the workers and the labor collectives. This has not been lost everywhere, has not been pushed out everywhere by a parasitical, and sometimes even openly self-seeking psychology. But on the whole the situation is an alarming one. The existing economic mechanism frequently makes it necessary to pay more to a person who has done little and, at the same time, does not permit full due to be given to the person who is doing truly high quality and productive work, of benefit to society as a whole, without inflating prices for the products that are being turned out. Sometimes, on the basis of pay, no particular difference can be seen between the leader and the slacker. This results in a paradoxical situation: The one who works poorly benefits. This situation is causing great concern in the labor collectives. Indeed, what we are talking about is social justice, the prestige of social labor, and, looking at the big picture, the position of the working man within society.

V.I. Revnitshev (general director of the Mekhanobr interbranch scientific and technical complex [MNTK]: This is also a very pressing problem in our collective. It is urgently necessary to raise the prestige of labor, particularly in the social sector of the national economy. With the development of the cooperatives, of individual-labor sectors of labor, the best, most able and skilled personnel are being won away from the enterprises. Symptoms of an erosion of the work force have appeared. What is happening is that labor collective councils are taking a basically unjustified position and by their ill-considered decisions, dictated by benefits of the moment, are introducing disorganization into our planned economy, into established economic ties, cooperation, specialization. It happens that plans are being developed on the basis of purely competitive considerations, and not of the requirements of the national economy, of scientific and technical progress. A peculiar kind of demarcation is becoming evident: Administration is emerging as a spokesman for the long-term interests of the enterprise, and the workers' collective council is becoming a spokesman for the short-term ones. There is something to think about here.

L.I. Ovchinnikova (chief of the planning department at the Pigment scientific production association): I would like to support my comrades. The situation with regard to the prestige of labor at state enterprises, to the realization of social justice, has truly become aggravated. At our collective we have accumulated the funds needed for an increase in wages. But because of the fact that growth of labor productivity is determined not on the basis of a reduction in costs, but in terms of an increase in amounts of production value, a lack of correlation arises between actually earned wages and the dynamics of value rates of labor productivity. The normative correlation between them is strictly controlled. As a result, the collective cannot receive money earned as a result of reducing expenditures and prime cost. And, incidentally, in the cooperatives, where there is no such norm, money is being paid out without any restrictions. It turns out that the measure of labor and consumption is applied only in the social sector of production, and moreover not always correctly, and that it is generally disregarded in the other sectors of the national economy. Where is the justice here? Does all this really raise the prestige of labor at state enterprises?

S.S. Gubanov: At the beginning of the current five-year plan, as is known, an investment and structural maneuver was undertaken to the benefit of the country's machine building complex, in order to obtain a return during the 13th Five Year Plan in the form of accelerated modernization of the material and technical basis of the entire national economy. How has this been implemented at machine building enterprises?

V.A. Murinas: We have been given "priority" only in one thing: During the current five-year plan they gave us increased rates for the growth of commodity production. Within the machine building complex, the matter has not reached the point of serious structural reorganization. For example, our association has its own special features: Basically, it manufactures products on the basis of individual orders and in small series. Steps that were taken made it possible to update 9 percent of the products list during 1987 and 17 percent in 1988. But rates for modernization of the fixed capital of the association itself have been far lower, even though capital investments are for the most part centralized and are assigned for a specific purpose. At the present time, about 40 percent of the association's metalworking equipment is more than 20 years old and, at the same time, a trend toward an increase in the share of obsolete equipment can be observed. In order to overcome this tendency toward a worsening of our aged equipment stock, the coefficient of modernization for the active part of our fixed capital must be increased to 10-12 percent per year, instead of 6-7 percent.

Response: And what is keeping you from this, if the association enjoys centralized capital investments from which funds are allotted?

V.A. Murinas: In the first place, there have been and continue to be problems in determining the amount and composition of funds. We have calculated and substantiated our needs for re-tooling at the association, but allocated funds are insufficient to cover them, and this difference is a big one. For example, 163 units of equipment were needed in 1988, and funds were allocated for 113; the modernization program for 1989 envisages replacement of 230 basic equipment units, but there are sufficient funds only for 94. In the second place, receiving funds still does not mean they will be spent.

Thus, the Ministry of the Electrical Equipment Industry [Minelektroekhprom] assigned the plant funding allocations for 94 units of equipment in 1989, but without any indication of models and delivery schedules. As a result, contracts for 7 units had to be returned to the suppliers inasmuch as they proposed equipment which is not needed by the association and was not stipulated by our order. Two orders for 15 metal lathes have not been accepted for filling. One plant makes the excuse of an absence of LPEO [expansion not given] in the state order, another—that the consumption limit established by the Minelektroekhprom is being exceeded. Contracts still have not been issued to the plant for 50 units of equipment and it is not known whether this means that they will be rejected or, perhaps, that they will propose something we do not need, although all the supplier plants to whom funds have been allocated have been sent telegrams concerning our needs.

An attempt to obtain equipment through direct contacts with the suppliers has not met with success: Of 50 machine tool building plants to which letters have been sent with requests for the conclusion of contracts for the delivery of equipment, 49 have refused us in this, saying that they are overloaded with state orders.

So you see, we are being stymied by a low level of organization in this matter, by all sorts of misunderstandings, and by a lack of coordination of economic ties within the national economy. These result in a loss of time, effort and energy and they distracted us from the business at hand and our most important tasks.

V.I. Revnivitsev: In connection with the state of scientific and technical progress within the machine building complex, it must be said that the existing economic mechanism, in any case in its present form, is a mechanism which encourages Soviet scientific production to go abroad, onto the capitalist market. I reach this judgement on the basis of specific experience. Here is the kind of situation which developed with us at the Mekhanobr MNTK. A system of machinery has been developed for the entire metal-working production cycle, beginning with the ore-enrichment combines. It exceeds world standards. New technology ensures enormous savings of social labor within the complex. And note, this is specifically within the most labor-intensive sectors. Nonetheless, we are not being successful in placing orders for the

new equipment. All the enterprises of an appropriate profile are involved and loaded to the limit with the manufacture of obsolete products, ones which however guarantee production volumes. And if certain enterprises do agree to produce our system of machinery, then they ask such exorbitant prices that it is more profitable to send the order abroad and to buy the finished products there. Incidentally, the leading capitalist firms have already made their proposals to us.

Question: And have you tried to get the new equipment included in a state order [goszakaz]?

V.I. Revnivitsev: We tried. Nothing came of it, other than discovering ways used to evade state orders. They told us that we had to demonstrate that production will correspond to the level of progressive world achievements. We demonstrated this. Then they said: Coordinate it with the Ministry. We coordinated it. They sent us off to coordinate it with the enterprise. And the real haggling begins. It became clear that even if everything is coordinated on all levels, but an enterprise for some reason does not want to involve itself in the production of new products, then a final, very reliable method of evading the state order is put into play—price. With the aid of price, while at the same time being protected by the position of the labor collective council, an enterprises will always be able to avoid having products that are not beneficial to itself included within its plan, even if they benefit society.

Response: It is necessary simply to perfect the mechanism of self-financing.

Yu. P. Arkhipov: Taking a look at the kinds of processes that are developing within the economy, I can state the following: If the present mechanism of self-financing is brought to perfection, then economics at the enterprises will be brought to an impasse. Our association was able to meet the Mekhanobr MNTK halfway. We took an order for a crusher but cannot stretch ourselves further, both on grounds of material and technical supply and of production capacities. And in the given case, to speak frankly, we profited by the structural restructuring we underwent with regard to the list of products we produce. We took it not so much for considerations of economic benefit as because of the necessity of supporting the priority of the work being carried out by the MNTK, ie. on the basis of higher, nationwide interests.

V.A. Murinas: Unfortunately, even under the new conditions of economic management, the interests of the state and of the enterprise do not always coincide. What profits one is frequently unprofitable to the other, and vice-versa. Thus, we have been given the right to carry on foreign trade operations on our own and have concluded an agreement for the delivery of electrical machinery to the PRC. But, in accordance with a state order, domestic deliveries take up almost all such machinery. Without hurting anything, fulfillment of certain contracts within the Soviet Union could be delayed

in accordance with the actual readiness of a project. But those placing orders have not agreed, since they have listed the machinery in their "start-up" plans. Actually, the equipment being delivered will wind up in above-normal stocks for a certain period of time. In essence, how should this situation be evaluated? Do the interests of the state and of the enterprise coincide here?

Response: But under the new conditions such a situation cannot exist in principle. The interests of the enterprises and of the state should coincide, if everything has been worked out correctly.

V.A. Murinas: We, the economic managers, have to deal not with that which should be, but with that which actually is. Of course, there should not be any disparity between national interests and the interests of the enterprises, but they do exist—a fact that is still undeniable.

V.I. Revnitshev: And we have run up against it. The system of machinery developed at the Mekhanobr MNTK responds to national economic interests and priorities. The interests of cost-accounting enterprises remain secondary. And this is not only a matter of placing orders at one enterprise or another. In the final analysis, high economic effect can be produced only by the entire complex of machinery, united in a single technological chain—from the quarry to machine-processing, one which is moreover designed for synchronous operation, for production that is coordinated in terms of time. Consequently, manufacture of all the component parts within this system of machinery must also be coordinated to the same degree, in terms of time as well. A high effect cannot be expected from a crusher that is not operating as a part of the complex, or, for that matter, from any other technology that is excluded from it. Annual effect comes to a maximum of 30,000 rubles. But when working as part of a complex of machinery, this calculation would reach into the millions.

Response: Apparently, the state order should be drawn up for the manufacture of an entire system of machinery, thinking specifically about the final, reproduction effect?

V.I. Revnitshev: Absolutely, the state order should be a guide post for achieving final national economic effect. Then the work of the various enterprises engaged in fulfilling a single state order would also be coordinated.

V.A. Murinas: This is interesting; and who, in general, thought up the idea of naming an individual article, an individual piece of machinery, or an individual machine tool a state order? In my opinion, it is completely obvious that the state order should lead specifically to high final results and should bring machine-building production, in particular, up to world standards, to world parameters qualitatively, economically, and ecologically. And one more thing should be said. At the present time, USSR Gosplan and USSR Gosstab issue state orders and limits only for a period of one year and very late, which makes it more difficult to make timely

preparations for production since, in practical terms, they do not have a real prospect of development of the national economy even with regard to such unique objects as electric power plants, rolling mills, boring installations, etc.

The plan must be formulated for periods of time that are adequate to allow timely order of materials and component parts from the plants that produce these, taking into account one's own production plans and those of the manufacturing plants. Otherwise, as is evident from the experience of past years, an order for materials and components that is not balanced in terms of time will lead to a shortage of certain materials, to an increase of cases when norms are exceeded, to fragmentation of production, and to a worsening of its financial situation. Three and eight year order certificates are necessary for one-of-a-kind production and five-year ones for new technology. This is particularly important for the Elektrosila association.

Yu. P. Arkhipov: Inasmuch as we have touched on the state order, it is appropriate to recall the following. When, along with the Izhorskiy Zavod production association, producers of components, including its suppliers, have also received state orders, it has been considerably easier to work. We have been guided by the state order, and our suppliers have as well. But recently the picture has changed sharply for some reason. State orders are being assigned to us, but not to our suppliers. They are not being taught a sense of obligation toward us, the chain of cooperation is being sharply weakened at the "supplier-customer" link. In such a situation, the association also is unable to meet its obligations to its own cooperating enterprises: It itself is being let down time and time again by its suppliers. What is needed now is not autonomy, but coordinated work, particularly of labor collectives which are tied together by cooperation or specialization. If a state order is given for the production of products, then it is also necessary to assign it to the enterprises which are responsible for material and technical supply, assembly, etc.

V.I. Revnitshev: Actually, what is now being seen is a fragmentation within the machine building complex. Machines going into a single system, into a single technology, are being produced as components at enterprises that vary in terms of available technology and they are therefore of varied quality. And then they are sent to various places and are not tied together in a single system. Therefore, society is not receiving the effect that could be counted upon from the operation of a system of machinery. This is an unnecessary expenditure of effort, funds, and resources—it is wastefulness and truly poor management. It is no wonder that, with such planning, a very real absence of plan can often be observed.

Yu. P. Arkhipov: Now, what is really needed are not individual machine tools, but whole machine-tool lines, capable of ensuring a sharp improvement in the direction of higher labor productivity and higher output

quality. What is needed are technologies, and the most advanced ones. This is what machine building must aim for. A basis for all this must be laid in the plans of the enterprises and must at the same time be in agreement with the cost accounting interests of the labor collective. So far, we have not succeeded in achieving this.

L.T. Volchkova (candidate of economic Sciences, Leningrad State University): It is as if we are destroying the traditional methods of planning and management faster than we are creating new ones. Evidently, this is one of the key characteristics of the present stage of economic reform.

Response: It is better nonetheless to keep things in perspective!

L.T. Volchkova: I think so too. In fact, under conditions of restructuring economic management, we are making a transition from one system that has been developed for managing the economy over to a qualitatively new one. Therefore, a succession is necessary. We should not leap from one extreme to another, losing along the way the experience we have gained in the historical practice of centralized planning. It is necessary to improve the way we determine national economic needs, priorities, and proportions and to reflect these in plans, making use of the most varied forms and methods. It is important that they provide specific guide lines for the achievement of final national economic results connected with the satisfaction of people's needs, including the need for creative, meaningful labor as well. Of course, more productive labor should also be more highly paid.

V.I. Revnivtsev: At the present time, also, the state order, as a form of centralized planning, is making only a limited contribution to promoting the production of output based on Soviet science at enterprises within our national economy. This is an extremely dangerous phenomenon. Note has already been made of what will happen if the national economy rejects the achievements of science and technology and if the international market attracts them. We will be forced to acquire abroad our own technology, which we ourselves have developed, which has been brought to the stage of industrial production, but which has been mastered by capitalist firms. And this occurs sometimes, although we could produce and sell high-class technology, equipment, and machinery ourselves.

Yu. P. Arkhipov: Present forms of planned management of the economy are in fact far from perfect. I will give an example using capital investments. At the Izhorskiy Zavod production association, only 18 percent of existing equipment scheduled for technical modernization on the basis of the program established for 1989 has been covered by contracts. With such a situation, it is hardly possible to talk about planned modernization of production capacity. Refusals to conclude contracts follow one after the other, and the association has neither economic levers that are capable of helping in the situation that has

developed nor a possibility of influencing events through centralized planning. What might be called "dead zones" have appeared in various sectors of the national economy, areas which are not accessible to planned management. Thus, customers used to be assigned to suppliers. This was not without its shortcomings, but nonetheless played a certain role. Now this does not exist. And there is nothing to take its place. Instead of solving questions of production specialization better than before, we are basically just letting them drift.

V.A. Murinas: Certainly, nobody now has a simple answer as to how to change the state of affairs at the enterprise. It has been assumed that expansion of the rights of the enterprise in the sphere of planning production and the sale of output and a shift to wholesale trade in the means of production will lead to a situation where the enterprise will itself actually formulate its own production plan. But this is not happening. When developing its plan, the enterprise is limited by state orders and contracts established for the direct ties that have developed. Besides this, under the aegis of contract prices, a sharp rise is taking place in the cost of materials and manufactured components. Because of a fear to be left entirely without them, an enterprise is forced to agree to such prices or otherwise violate delivery contracts.

Yu. P. Arkhipov: In fact, there are no ready recipes. And more problems have been discovered than could have been expected. Practice has uncovered many disconnections which were not detectable from a distance. Of course, a factor such as the relative lag of the new when taking the place of the old has an effect. For example, wholesale trade in the means of production is a good idea, but we do not have it, in essence. In order to raise the level of independence of an enterprise, it should have the capability of rapidly modernizing its product list in keeping with changing customer demand, i.e. to remove one product and put out another improved, higher-quality, more progressive one. But such a change is connected, as a rule, with a restructuring of production capacities. It is necessary to get rid of a certain part of them and, on the other hand, to supplement another part. If enterprises could quickly, without particular problems, sell some types of equipment and obtain new ones in exchange, then this would only benefit matters. But, in practice, not everything is simple. In our association, we use unique equipment, which can not be found anywhere in ready form. It is difficult to obtain it. Production of such equipment needs to be planned in advance on the basis of plans for re-tooling the association and updating the list of products it produces. Obviously some coordination is necessary between our plan for technical modernization and the plans of the enterprises which manufacture new equipment for us. And indeed, it is also not individual machine-tools and machinery which we need, but entire complexes and systems of machinery, machine-tool lines, etc. Wholesale trade is entirely possible for certain types of equipment, as a rule, for universal machine tools and machinery (if an integral technology is not required). But when it is



necessary to change a technological process, a system of machinery, coordination specifically of a planning nature is required. I know on the basis of experience, that a state order which concerns an entire technological chain of mutually related enterprises is a good thing and that one that is directed only to our association alone, without suppliers, is nonsensical.

V.I. Olerinskiy: There is still one more problem which has not even been mentioned—plan norms. Earlier, when plans came down from above, the goal of enterprises was to drum up a few more resources and to get a plan that was a little smaller. Now, enterprises have been given broader rights in the area of planning, with the hope of overcoming dependence on others, group egoism. However, this phenomenon has not disappeared, although it has changed its forms. The enterprises are least of all to blame in this. They are operating on the basis of their own economic conditions, of the conditions of economic management. If earlier, the basic subject for “haggling” was the plan, the size and indicators of plan assignments, then plan norms have also now become such. There is too much subjectivism in determining their content and specific magnitude! It is not surprising that the interests of the enterprises and of the state have now come into conflict within them. In a number of cases, established norms are directly encouraging an increase in prices for the sake of increasing commodity volumes. These are norms that characterize that same pursuit of growth rates, which has remained even in plans which are developed by the enterprises themselves. A curious picture emerges: Trying to reduce the norm for deductions from earnings to the budget, enterprises are objectively acting against gross rates. On the surface, this would not seem to coincide with state interests, in particular financial interests, but in essence it is defending precisely these. Everything depends upon how one views state interests.

S.S. Gubanov: In the final account, all economic interests should come together in savings of labor and resources. I would like to know in this connection how a reduction of labor expenditures, of the labor intensiveness of products, is being planned at enterprises of the Leningrad machine building complex.

V.A. Murinas: This is a sore subject. Various interests intersect here. The workers are interested in wages. They want, and quite justifiably, to be given good pay for eight hours of the working day. The workers are prepared to work productively, but they need to be provided with materials, equipment, manufactured components and tools for the full working day. In practice, we are not always successful in doing this. And for this reason alone, incidentally, wages are not always earned. On the other hand, they expect high quality production from us. The problem is how tie high pay for the workers to the quality of production, to the final results of their work. And, of course, to a reduction of labor intensiveness. At the present time, the question of reducing labor intensiveness is immediately associated by the workers with a

reduction in pay rates. Especially in connection with the well-known decree about restructuring the wage scale system. What happens is that a planned reduction in labor intensity is perceived as a planned reduction of pay rates. Beside this, with the transition of the association to new wage scale rates, of 500,000 norms that were examined, far from all have been supported by organizational and technical measures aimed at reducing labor intensiveness. In such circumstances, and all the more so with small-series and individual production and a relatively high level of product modernization, it is not realistic to plan a large reduction in labor intensiveness.

Question: In other words, at the level of the enterprises, national economic interests distort the “monetary-value productivity - prices” dependence and, at the level of the working place—the “labor intensiveness - wage scale” dependence?

L.I. Ovchinnikova: For us, the planners at the enterprises, this is obvious. A reduction in labor intensiveness profits only the national economy as a whole but, for the enterprise, it is extremely unprofitable. Why? First of all because labor intensiveness is in fact closely tied to pay rates and norms. There are also other reasons. In reducing the labor intensiveness of articles, the workers are increasing the real productivity of labor, but are reducing its value productivity. This is where the greatest distortion of interests occurs.

Response: And if labor productivity is calculated in terms of net output?

V.N. Ivanova (candidate of economic sciences, senior scientific associate, Leningrad State University): Many scholars propose just this. Some even see a panacea for all ills here. But in fact this would change little. Judge for yourselves: All forms of net output (standard, normative, etc.) are directly dependent upon expenditures of human labor, and this means upon labor intensiveness as well. The higher the labor intensiveness of output, the higher the share of net output. So that if you calculate labor productivity on the basis of net production, then again a reduction in labor intensiveness will show a reduction in labor productivity, although in fact is goes up. Calculation on the basis of net output does not provide an escape from the situation that has developed, as is quite rightly stated in recent publications dealing with the anti-expenditure approach.

L.I. Ovchinnikova: Because of the fact that productivity is computed on the basis of value, of monetary indicators, our collective cannot get earned funds [zarabotannyye sredstva] for wages, inasmuch as, in such a case, the normative correlation between an increase in wages and an increase in labor productivity is not sustained.

Question: And if labor productivity is calculated in inverse proportion to the labor intensiveness of manufactured articles and products?

L.I. Ovchinnikova: Then the normative relationship is in our favor. If calculations are made on the basis of "gross production" or even net output, then it is not in our favor. Calculations are now done on the basis of commodity volumes. In such conditions, in order to get earned funds, an enterprise is tempted to raise prices. Then all its problems are solved at once, the correlation between growth of monetary-value labor productivity and growth of wages becomes "good." It turns out that we are fighting inflation by means of increasing it. And of course, by the same token, the "labor intensiveness - wage rate" connection undercuts material interest, as we have already discussed. It has been correctly noted that to plan labor intensiveness is just the same as to plan a reduction in wage rates. This is just how it looks in the eyes of the workers. Different economic management conditions are needed for it to be possible to plan a reduction in the labor intensiveness of output without, at the same time, violating the interests of the worker and the labor collective.

M.N. Golovkin (instructor at the Leningrad Oblast party committee): In my view, what we have here are general regional problems. It is also necessary to plan intensification of production. And a certain amount of experience has been accumulated in our region. Questions of intensification—these are questions not only of a single enterprise, taken separately. Much will depend upon the inter-relationships within the regional economic complex, especially upon inter-sectoral specialization and concentration of regional production units. Experience in carrying out the "Intensification-90" program shows that the region possesses considerable reserves and possibilities for accelerating scientific and technical progress through conservation of labor, material resources, and production capacities. Thus, as a result of certifying working places and changing over to two- and three-shift work, it was possible to free 140,400 square meters of production area in 1986 and 129,900 square meters in 1987. In 1988 approximately 89,600 square meters will be freed. These areas are being used for the installation of progressive equipment and improving the conditions of labor.

The freeing of production areas makes it possible to carry out reconstruction without new construction, to accelerate the removal of obsolete equipment, to gain time, to more quickly modernize and master the production of progressive products. This is very important because we cannot content ourselves with a structure of industrial production where about 30 percent of the metal-cutting and forge and press equipment has been in service for more than 20 years. Obviously, we will have to continue our search for new levers and forms that are capable of pointing the plans of enterprise toward an intensive type of economic management.

S.S. Gubanov: Let us conclude our meeting. On the whole, a useful discussion has taken place. It has revealed "sore spots" in the economic management

mechanism, including those which relate to implementing planning at the enterprises as a integral part of centralized planning. A great deal of work still has to be done on overcoming the "cost-is-no-object" trend in the economic mechanism and on planning and providing incentives to production. A whole series cost "knots" exists within production relationships. In order to "untie" these, it is necessary to overcome a situation in which prices serve as a means for supporting rates of economic growth and where reduction of labor intensiveness turns into a reduction of wage rates for the workers. Particular attention deserves to be given to the repeatedly heard proposal that the state order be made a tool for balancing inter-sectoral proportions, that it subordinate the efforts of all links of one or another technological chain to the achievement specifically of final social and economic results. Production plans should serve to satisfy real requirements. Here, indeed, is the chief conclusion which can be made from the exchange of opinions that has taken place.

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## INVESTMENT, PRICES, BUDGET, FINANCE

**Inflation Rate Calculated, Causes Examined**  
18200298 Moscow *EKONOMICHESKAYA GAZETA*  
in Russian No 13, Mar 89 p 12

[Article by A. Shmarov, head, Sector of General Social Problems, Distribution Relations, and Population Income, Scientific Research Institute of Economics, USSR Gosplan; and N. Kirichenko, scientific associate: "The Inflationary 'Splash': Scale and Causes"]

[Text] Inflationary processes are intensifying in our economy. Their development continues to be influenced, first, by the extremely unbalanced structure of the national economy which is primarily oriented toward the development of the production of the means of production. Second, the influence of large-scale investment in costly and ineffective projects, the expansion of incomplete construction, the payment of unearned money, and the accumulation of colossal inventories in production is still great.

Knowledge of the scale of inflation plays an extremely important role in the management of socioeconomic processes in the country. This is essential for compiling a balanced plan, for taking into account the real financial and monetary resources, material-physical correlations, and for correctly evaluating the people's well-being.

USSR Gosplan's Scientific Research Economics Institute undertook to determine the rate of inflation in the consumer sphere. Evaluation is of an approximate and minimal character. As a result of the absence of sufficiently complete statistical data, it has not been possible to include in the calculation the rise of prices on goods

and services of the new cooperative and in the "black" market, and the lowering of quality in the face of stable prices if it is not fixed by standards. The component of the growth of prices associated with the improvement in the quality of goods was not identified for all groups of goods and services.

The rate of inflation was evaluated as the relationship of the sum of inflationary processes to all three channels in

which inflation is manifested: (1) the inflationary growth of average commodity prices; (2) the formation of superfluous savings; and (3) the deterioration of state quality standards in the case of stable list prices vis-a-vis the population's total expenditures on goods and services together with the growth of savings in both organized (savings banks) and cash form.

Here are the calculated data:

	Average for 1981-85	1986	1987	1988	Average for 1986-88
General inflation index in economy's consumption sector (in %)	5.7	6.2	7.3	8.4	7.0
Of which, the inflation index in retail prices and the rates of paid services, and the deteriorating quality of products in stable prices (in %)	1.6	3.0	3.1	4.1	3.4
Intensity of inflation (billions of rubles a year)	19.5	23.4	27.9	36.4	29.2

As we see, inflationary processes are occurring with increasing intensity in the consumption complex. During the current five-year plan, the rate of inflation increased by more than one-third while the intensity of inflation increased almost 1.6-fold. The formation of surplus savings in the population's hands is the basic factor underlying the decline in the purchasing power of money. Under the 12th Five-Year Plan, the share of the price component of the inflationary process dropped by five percentage points; in 1988, it accounted for a little less than 40 percent.

The main conclusion that can be drawn from these calculations is that the general increase in the population's money incomes in 1988 (8.5 percent according to the data of Goskomstat [State Committee for Statistics]) was to a considerable degree nullified by the decline in the purchasing power of money.

Inflationary processes under the current five-year plan have characteristic features. The substantial increase in trade in food products for agreed-upon prices through Tsentrosoyuz [Central Union of Consumers' Cooperatives] has become a new phenomenon. This has above all influenced the increase in food costs of the segment of the population that does not have free access to the purchase of food products—especially meat and dairy products—for state retail prices.

The average prices of goods that are traditionally purchased by low income strata of the population have grown at a higher rate in recent years. Thus, according to the data of USSR Goskomstat, in 1988 potato prices increased by one-third; prices on grain products—by one-fourth; prices on children's clothing and footwear—1.5-fold. Prices of outer garments, suits, dresses, blouses, and shirts rose substantially. This can also be classified among phenomena that are unpleasant for all groups of the population.

There has also been an appreciable increase in the number of persons who are forced to save whether they wish to or not. Last year and in preceding years, the people belonging to traditional groups with substantial savings were those who had the possibility of sharply increasing their usual earnings by working on a contract basis, by collaborating with cooperatives and development centers, and who worked on cost-accounting topics. They were for the most part highly skilled workers, builders, leaseholders, programmers, engineers, inventors, and scientific workers, many of whom had not been highly paid in the past.

Upon acquiring additional, largely unexpected money, these people began making purchases that they would previously had to save up for years to buy: television sets, furniture, outer garments. The result was increasing shortages in the market which led to the formation of additional unsatisfied demand in the form of forced savings. And even though the increase in the population's savings in 1988 was less than the increase in money incomes, which in itself was a positive and atypical phenomenon for the recent period of our development, the share of the increment of excessive savings in their overall growth dramatically increased.

What was the cause of the inflationary phenomenon of recent years? The fact of the matter is that such features of the new economic mechanism as the freedom of enterprises to plan their own product mix, a certain degree of decentralization of price formation, free distribution of cost accounting income at leased enterprises, the possibility of large-scale redistribution of money through cooperatives, and contract work, and especially the existence of a large number of forms of material incentive within the framework of the first and second models of cost accounting have made it possible to dramatically increase the quantity of money available in cash form ["obnalichivaniye" *denezhnoy massy*]. This

situation is also exacerbated by the fact that the development of antiinflationary measures has substantially lagged behind the expansion of economic liberties of the basic production link. The inflationary splash is the market's natural reaction to the absence of an economic regulatory system appropriate to commodity-monetary relations.

The development of economic management techniques and the elaboration of antiinflationary policy acquire particular timeliness. We do not as yet have ready methods for this contingency. But after all, even now it is possible to attempt to compensate the consequences of inflation at least for people who are least protected against it—pensioners, students, and others receiving fixed incomes. This requires learning how to foresee the development of an economic situation, how to manage the inflationary process, and determining precisely where it is less dangerous—in prices or in shortages. In our view: in prices.

The planning of future price changes will indeed make it possible to trace more precisely manifestations of the negative consequences of inflation in the consumption complex and to develop a clear, socially defined system of direct and indirect compensators of inflation. Thus it would be possible to introduce annual coefficients for conditionally constant incomes—pensions, scholarships, grants, and salaries that would restore their real content. The minimum interest paid on deposits must be determined on the basis of the growth of retail prices. It is necessary to incorporate into planning practice the long-range calculation of the minimum budget (taking rising prices into account) and on this basis to formulate a compensatory policy in the area of wages, pensions, and social security.

### **Tighter Credit Restrictions Urged**

18200239 Moscow *DENGI I KREDIT* in Russian  
No 2, Feb 89 pp 39-41

[Article by K. M. Araslanov, candidate of economic sciences: "Responses from the Readers: A More Active Role for the Banks"]

[Text] The USSR Law on Banks is in the drafting stage. It will define the status of banks, their place in the country's economic mechanism, the basis of the development of the banking system and its more active role in the economy based on its cumulative work experience under the conditions of the economic reform. Analysis of its first steps shows that the restructuring of organizational and economic (especially credit) relations and the more active role of credit and of the banking system in general do not come automatically but require thorough development and concretization and possibly the correction and refinement of the basic provisions of documents adopted by the CPSU Central Committee and the USSR Council of Ministers with the aim of reforming the nation's banks and amplifying their influence on increasing the effectiveness of the economy.

The broad discussion of credit problems in the economics press is consequently interesting and useful. O. L. Rogova and L. F. Moiseyeva make numerous constructive proposals on reforming the banking system and strengthening monetary circulation in their article "The Banking System: Interests and Responsibilities."<sup>1</sup>

In my view, the authors correctly note that the most important thing is how to make the functioning of the banking system a part of the democratization of economic management. This is not easy to do because it is very difficult to overcome the tendency that developed over decades for credit to be "absorbed" by expenditures on relatively or totally ineffective objects and measures, on "*dolgostroy*" [protracted construction projects] that yielded no return, on useless equipment, on half-empty livestock complexes, and on inferior, unsalable goods. They also correctly reason that while the act of issuing credit is subject to administrative influence, its repayment hinges entirely on the actual movement of value: before the product has been created (but the expenditures have been made), or after the product has been created but not sold, the economic debt cannot be canceled and the movement of money cannot come under administrative influence.<sup>2</sup>

Stricter economic regulation of the demand for credit is justly proposed as a measure for securing the repayment of credit on or ahead of schedule. It particularly makes sense to authorize banks to screen borrowers according to the effectiveness of their work and to charge higher interest rates. Support is also merited by the proposal to declare bankrupt enterprises whose products are without promise, whose technology is obsolete, and who lack their own capital for technical retooling.

Chronic "diseases" of the entire economic mechanism, especially the disruption of the "metabolism" in production and circulation could not fail to affect monetary circulation—the systematic circulation of the money mass. Newspaper and journal pages in recent years have been filled with alarming but true "diagnoses"—the money mass is growing faster than the commodity mass, too much credit is being issued, "credit inflation is developing";<sup>3</sup> the result is a "life of indebtedness,"<sup>4</sup> etc.

It is correctly noted that credit is losing the purpose for which it was originally intended, that too much credit is being granted with an obvious bias in the direction of long-term investment, the systematic immobilization of the bank's resources, and the ignoring of credit's fundamental principles—that credit must be secured, must be granted for a specified period, must be granted for a specified purpose, and must be repaid. Long-term credit increased 13-fold between 1966 and 1985 at the same time that the accumulation fund trebled and the amortization fund increased 5.5-fold. The total defaulted indebtedness of enterprises was more than 30 percent of their own working capital.<sup>5</sup>



And indeed, credit has ceased to be an essentially mobile and flexible lever and stimulus and has become a means of "mending" holes in the economy, especially in the countryside, of covering the permanent unprofitability of collective and state farms. Some credit resources have long been bogged down in relatively ineffective and occasionally in bad economic actions that are frequently taken under the administrative pressure of executive organs. Bank accounting, which is by its nature close to economic accounting, has been replaced by the simple distribution of funds based on social security principles.

Some of all investments, including credit-financed investments, were used extensively to expand productive capital. The latter increased 2.9-fold throughout the national economy between 1970 and 1987 whereas the gross social product increased only 2.1-fold during that time.<sup>6</sup> The output-capital ratio declined. The profitability of production fell appreciably. As a result, credit, which comprises approximately one-seventh of the USSR's national wealth,<sup>7</sup> rapidly increased in volume but did not promote the acceleration of the growth of production's final indicators and in a number of cases even inhibited it. The sharp reduction of the share of credit in housing construction during that time<sup>8</sup> was also reflected in the lowering share of nonproductive capital in the national wealth. On a per capita basis it declined from 22.8 to 22 percent in 1987 compared with 1970.<sup>9</sup>

Reorganization of the credit system must primarily meet the demands of unified technological and economic policy without which economic progress is impossible. The point is that credit has frequently been granted in accordance with the instructions but without regard to the tasks of unified technological policy. Loans have been used to equip small, primitive sectors and shops for the in-house production of brick, reinforced concrete components, and miscellaneous construction materials. Here and there credit breathed life into primitive foundries and smithies and tiny power generating facilities. As a result, many enterprises have become "overgrown" with a marginally profitable but more frequently unprofitable natural economy.

Credit must work primarily for the intensification of the economy, i.e., must promote the qualitative modernization of fixed capital, its more complete utilization, the acceleration of the turnover time of capital, and the improvement of the product mix and the consumer properties of the product.

We also believe that credit should primarily be short-term, to a lesser degree medium-term, and to the most limited degree long-term (as a rule, only for objects in the nonproductive sphere: housing, etc.). Credit should be used to develop only production facilities that yield an early return, primarily for consumer goods production, for introducing fundamentally new technology that promotes the manifold saving of resources. For example, it may be highly effective to grant credit for such facilities

as the video recorder plant that is being built in Voronezh under contract by a Finnish cooperative and that is scheduled to be commissioned in 1.5 years.<sup>10</sup>

We must not "freeze" credit resources in marginally effective "dolgostroy" and in equipment with above-normal recoupment periods because that would fan inflation. The unfeasibility of this kind of credit is also attested to by analysis of the practices of the late twenties and early thirties when recoupment periods were as long as 15-30 years.

Credit in fixed capital must be given a competitive, market nature. In an economic sense, loanable funds are a commodity the realization of which must necessarily yield an effect that ensures an early payoff. A credit auction of sorts will be an effective stimulus of highly effective projects and innovations. The time has come to make the transition from "allocation" based on the principle "a little bit for everyone" to the choice of the most effective variants. Priority directions must be determined in any kind of financing and especially in credit-financing. To date, for example, the Machine Building Bureau of the USSR Council of Ministers together with USSR Gosplan and the USSR State Committee for Science and Technology have formulated 44 priority directions.<sup>11</sup>

Our calculations for Krasnodar Kray industry suggest that at the present price level, the profitability of the great majority of enterprises is insufficient even for self-support to say nothing of self-financing. Their own resources alone will be insufficient for technical retooling. The demand for credit may increase. As already noted, it can be granted on a competitive basis for the most effective measures that have the earliest payoff, that increase the effectiveness and especially the profitability of enterprises.

As O. L. Rogova and L. F. Moiseyeva correctly propose, the low level of profitability of many enterprises and their unsatisfactory financial status urgently demand financial certification.<sup>12</sup> The existing procedure governing relations with enterprises and organizations that have been converted to a special credit and payment program and that are subsequently declared insolvent would seem to be in need of change. The certification of enterprises must first of all be of a preventive nature. In addition to the criteria and indicators used to evaluate the performance of the enterprise, we should consider the degree to which the level of its profitability ensures self-support and self-financing and whether it has sufficient profit to secure at least the enterprise's "basic subsistence"—for the formation of its funds at least at the base level.

It is also necessary to take into account the enterprise's credit-output ratio [*kreditoyemkost*], its wage-output ratio [*zarplatoyemkost*], the production of consumer goods per ruble of wages and ruble of credit, the share of short- and long-term credit, credit turnover time, and the

recoupment period. In the case of joint enterprises involving foreign firms, their currency potential should also be evaluated. Of course under our conditions there were no failures of state banks, but there were repeated failures of considerable sums of credit investments. We need only recall the frequent deferment of loans to collective farms, the cancellation of their indebtedness, the investment of credits in mothballed objects and obsolete projects.

In our view, the introduction of financial certification will supplement the inventorying of indebtedness.

As is known, the share of unprofitable farms in our country is very considerable. In USSR industry alone, 3960 enterprises—13 percent of the total number of enterprises—finished 1987 operating at a loss.<sup>13</sup> Price reform will hardly make all of them profitable. Naturally measures will be taken to normalize their activity all the way up to reorganization and even liquidation. Some will need funds for the reorganization of production. It would seem that they should be offered in the form of credit guaranteed by higher organizations.

The question of financial relations between banks and the USSR Ministry of Finance also requires a radical solution. The practice of using bank resources to defray budget deficits must be eliminated. It makes sense to float more state loans with a higher share of lottery premiums.

We should also strictly observe the principle of repaying credit within the specified time, strengthen its role in curtailing the duration of the production cycle, the realization period, and the acceleration of turnover time throughout the entire "money-commodity-money" cycle. These indicators do not always improve in reality. A paradoxical situation develops. What takes longer: producing a complex machine tool or selling a suit? Analysis conducted by us at a considerable number of kray enterprises and trade organizations has shown that the turnover of trade organizations is of much longer duration than that of machine building plants. It is therefore necessary to reduce the time for which production credit is granted.

At the same time, it is necessary to substantially expand "industry-trade" credit relations. As is known, since 1987 trade has accepted from industry goods that deviate from product-mix contracts and sold them on commission. Practice has shown that the share of such goods is not so very great whereas the mass of goods sold beyond their season is quite considerable. Of course, trade's rejection of goods with an obviously questionable sales potential would be a radical measure. But there are goods with a certain risk. In this situation, it also makes sense to assign them to trade on a commission basis and to issue credit for strictly specified periods.

With the aid of credit, it would also seem possible to speed up turnover by reducing the time for submitting documents required to secure credit for goods shipped.

There should also be support for proposals to strengthen the cost accounting role of banks, in particular for the creation of consortiums with their participation.<sup>14</sup> In the aspect of development of intraproduction cost accounting and the organization of intraplant "banks" that issue credits to enterprise subdivisions on the basis of the final results appears promising.

The intraproduction credit system is used in particular in the Krasnodar Machine Tool Building Production Association im. G. M. Sedin. The credit fund is created on the basis of initial contributions of subdivisions in a fixed sum per worker as a result of part of the material incentive funds of subdivisions, savings on the wage fund and loan interest. Rates of payment for credit and for keeping funds in the credit fund are differentiated. Naturally, all these operations are of a noncash nature. Loans may be granted, for example, to cover an overexpenditure of the wage fund. In the second stage of development of intraproduction credit, it is also planned to introduce commercial intershop credit based on promissory notes.

The literature has already noted more than once that we have taken only our first very timid steps in the area of differentiating interest on bank loans. The consolidation of bank cost accounting, the increasingly common approach to loan capital as a commodity, the transition to the selective, competitive issuance of credit for enterprises, projects, and types of credit based on principles of the credit market require the substantial restructuring of interest policy. Numerous proposals to introduce commercial credit deserve support in this regard.<sup>15</sup>

The ideas expressed above can in our view become one of the ways of normalizing the country's monetary circulation. But their realization must be preceded by the broad discussion both of the draft as a whole as well as its specific details.

#### Footnotes:

1. DENG I KREDIT, No 8, 1988, p 19
2. Ibid., p 21, 24
3. KOMMUNIST, No 15, 1987, p 35
4. SOVETSKAYA ROSSIYA, 7 May 1988
5. VOPROSY EKONOMIKI, No 5, 1988, p 35
6. Calculated on the basis of: *SSSR v tsifrakh v 1987 g.* [The USSR in Figures in 1987], *Finansy i statistika*, 1988, p 21, 62

7. Calculated on the basis of: *SSSR v tsifrakh v 1987 g.*, p 60; *Narodnoye khozyaystvo SSSR v 1985 g.* [The USSR National Economy in 1985], Moscow, Finansy i statistika, 1986, p 565

8. *Narodnoye khozyaystvo SSSR v 1987 g.* [The USSR National Economy in 1987], Moscow, Finansy i statistika, 1988, p 595

9. Calculated on the basis of: *SSSR v tsifrakh v 1987 g.*, p 60, 168

10. EKONOMICHESTKAYA GAZETA, No 39, 1987, p 3

11. SOTSIALISTICHESKAYA INDUSTRIYA, 23 September 1988, p 2

12. DENG I KREDIT, No 8, 1988, p 24

13. IZVESTIYA, 3 October 1988, p 2

14. SOVETSKAYA ROSSIYA, 7 May 1988

15. VOPROSY EKONOMIKI, No 5, 1988, p 43

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## REGIONAL DEVELOPMENT

### LiSSR Potential Trade, Hard Currency Earnings Analyzed

18200292 Vilnius KOMMUNIST in Russian  
No 2, Feb 89 pp 43-48

[Article by V. Kazhdan, candidate for economic sciences and assistant professor: "Addressing the Issue of Currency Self-financing and Cost Recovery"]

[Text] On 9 October, 1988, USSR Council of Ministers draft proposals were published in the republic press on the issue of introducing regional cost-accounting. This draft affects all aspects of the republic's economic life and its adoption is called on to help resolve many burning questions and have a positive influence not only on the functioning of the republic's entire economic mechanism but also on the living conditions of its population. Therefore, a comprehensive analysis and painstaking modeling of possible consequences must precede this proposal's final form.

In connection with this, I would like to express my opinion on the issue of external economic ties and namely the possibilities of transitioning to this sector of activity on territorial cost-accounting and self-financing principles during the course of so very brief a time period provided for by the draft.

The transition to operations [based] on cost-accounting and self-financing principles can hardly be understood otherwise than as the need to balance hard currency

earnings and expenditures while conducting the republic's external economic affairs. And although such terminology as "hard currency self-financing" and "hard currency cost recovery" are absent from the draft proposals, nevertheless we are talking about precisely that because there cannot be any sort of territorial cost-accounting without observance of economic management. Moreover, it also must be taken into account that a certain portion of the republic's earned hard currency must be transferred to the Union budget for its utilization in State interests.

Essentially, we are faced with the need for balancing our republic's hard currency earnings and expenditures which will also determine our import potential and other hard currency outlays.

Just what kind of republic hard currency earnings and expenditure indices of the republic's exports and imports in particular are there at a time when we must begin restructuring our economy and transitioning to regional cost-accounting? And, generally speaking, do these indices exist?

It would seem that State statistics agencies should have to regularly collect and process export and import hard currency value correlation indices throughout the republics and other areas of the nation during the normal conduct of such important and necessary affairs to the State. However, neither the TsSU [Central Statistical Administration] nor its predecessor the Goskomstat [State Committee for Statistics] have collected or processed these data but have limited themselves to only a periodic (once in 5 years) compilation of an import and export balance for the Lithuanian SSR. As its basis, they have gathered data from a one-time survey of organizations engaged in exports and imports including export and import deliveries. Moreover, the TsSU has calculated exports and imports, not in hard currency [prices], but in domestic prices. In addition, either the calculation method or its thoroughness were such that the TsSU's indices really distorted the true picture. Thus, according to TsSU's data, 1982's export and import volume (The State Commission for Statistics has not yet published more recent data) totaled 574 million rubles in domestic prices at the time that its volume equaled only 249 million rubles according to export enterprises' accounting data verified by the State Planning Commission and the Lithuanian SSR State Committee for Material-Technical Supply. This sum includes the cost of items which are going to other enterprises for inclusion in exports manufactured by them. If we exclude these deliveries, then pure export or in other words, the cost of goods shipped by enterprises and organizations directly abroad totaled only 180 million rubles in domestic prices. Therefore, while analyzing the republic's exports, we unfortunately are forced to base the analysis, not on official statistical data, but on those data which the State Planning Commission has been collecting annually from export enterprises since 1960 in spite of bans on data collection which still have not been removed. Analysis of

the republic's exports is being conducted both in the context of the sectors-suppliers and in the context of the countries receiving Lithuanian goods based precisely upon these data. And although we were forced to make these calculations in domestic prices and were plagued by certain methodological errors, nevertheless their results provided a representation of export volume, its dynamics, structure, geography, national economy sector export delivery shares, and reflected trends in the development of export ties.

As for the entry of imports into the republic, as we have already stated, in contrast to exports, an analysis is conducted once every 5 years and we do not have any other figures at our disposal for past years. This is explained by the fact that the entry of imports into the republic is accomplished through extremely numerous, complicated channels and that, in the absence of required official statistical accounting, annual data collection and processing by a small foreign economic ties department workers collective has turned out to be beyond our resources, even under the best of intentions, which we now deplore. The State Planning Commission performed calculations on 1987 imports in domestic prices for the first time in 1988. Based on these data and also on data developed on exports, we will attempt to make certain conclusions.

First, about exports. What are Lithuania's exports in domestic prices and how have exports developed during the last decade? During 1977-1987, total export volume (taking into account deliveries [of goods] for [assembly into] complete sets) grew from 245 to 542 million rubles in domestic prices. However, this increase occurred primarily due to product deliveries from the Mazheykyay Oil Refinery whose export value was 217 million rubles in 1987. Export growth from all other sectors totaled only 80 million rubles, 75 million rubles of which went to socialist countries and 5 million to capitalist countries. Enterprises' total direct export deliveries equaled 471 million rubles, 71 million rubles of this was for the production of assembled export goods manufactured at other union republics' enterprises. It is important to keep this in mind while calculating the possibilities of obtaining [various] types of hard currency earnings (in the absence of official accounting).

In 1987, 189 million rubles or 40 percent of direct exports went to socialist countries and 282 million rubles or 60 percent went to capitalist [countries]. Moreover, one should bear in mind that Mazheykyay Oil Refinery production totaled 187 million rubles or 66.3 percent of total exports to capitalist countries. This must be emphasized since the statements of several speakers have called for limiting production to only those goods which the republic needs for internal consumption. Overall, the republic's export structure was as follows: 40.1 percent, oil refinery industry production; 30.5 percent, machine-building and metal-working [industries]; and, 9.9 percent, fishing [industry]. Other industrial sectors' production shares are insignificant.

We must discuss machine-building export production in more detail since it accounts for almost a third of the republic's share. This sector's average annual exports for the 5-year-period 1976-1980 totaled 117 million rubles, and from 1981-85, 119 million rubles. Export increases totaled 2 million rubles altogether. As for this sector's product deliveries to capitalist countries, its annual average decreased from 24 to 15 million rubles during this period. It is true that by 1987 total machine-building export production increased to 165 million rubles, however the volume of deliveries to capitalist countries totaled only 22 million rubles, that is, it did not attain the average annual level of the 10th five-year-plan.

Now about imports. According to the TsSU's data, the value of imports being imported into the republic in 1972 totaled 508 million rubles in domestic prices; in 1977, 685 [million rubles]; and in 1982, 1 billion 412 million rubles. Since the State Statistical Commission has not published official statistical data up to the present time, we are using data calculations carried out by the State Planning Commission on the basis of materials obtained from republic enterprises and organizations. According to the results of these calculations, the total value of imports introduced into the republic in 1987 totaled 1 billion 406 million rubles in domestic prices. The data presented below (Table 1) gives a definite representation of both the structure and geography of imports.

**Table 1**

Commodity Designation	Total	From Socialist Countries	From Capitalist Countries
		(in millions of rubles)	
Equipment	229	183	46
Spare Parts	68	63	5
Items Being Assembled	59	52	7
Raw Materials and Stock	495	167	328
Consumer Goods (Including Non-Food Items)	401*	304	97
Food Products	121*	100	21
Other Commodities	33	22	11
Total:	1406	891	515

\*in retail prices

In order to compare import data with export [data], one must permit products being delivered for assembly of export goods to be assessed among groups of countries in the same proportion as in direct export. Then, when comparing export and import indices (Table 2), we see that the value of goods imported into the republic in 1987 as a whole exceeded exports by 2.3 times, including from socialist countries by 4.1 times and from capitalist countries by 1.6 times.



Table 2

	Total	Including Socialist Countries	Capitalist Countries
Imports (in millions of rubles)	1406	891	515
Exports (in millions of rubles)	542	217	325
Excess of Imports Over Exports (times)	2.3	4.1	1.6

As already stated above, due to the lack of required data, this calculation had to be made in domestic prices and there is no doubt that they should be recalculated in export prices. Nevertheless, even these indices cannot but be taken into account while resolving the issue of the republic's transition to operations in accordance with territorial cost-accounting and self-financing principles.

A legitimate question in connection with this is can additional new factors emerge in the republic which during transition of all associations, enterprises, and organizations to its subordination could promote intensive export growth so that in the very near future we can change the correlation between imports and exports which has existed for a decade? In other words, due to what goods could we sharply increase exports in order to solve the problems of balancing hard currency earnings and expenditures?

In the new conditions, we can hardly be oriented to a further build-up of petroleum exports. This leaves machine-building. However, this product's rapid and stable export development is hardly possible without partial replacement of obsolete equipment, introduction of new technology, development and mastery of the output of new, competitive models, and use of modern, high quality materials, etc., including the need for redirecting certain enterprises with an orientation toward output of new types of export products. It is not possible for the machine-building industry's restructuring to take place in one or two years. Moreover, it must be kept in mind that, whether we want it or not, it is impossible to carry out restructuring in the machine production sphere during the scientific and cultural revolution without intensive use of the international division of labor, that is, without new hard currency investments.

A similar situation also [exists] with other industrial sectors' exports: building materials, woodworking and cellulose and paper, light, chemical, and others. For the last ten years, the total value of the republic's sector export deliveries (less the oil-refining and machine-building sectors) rose only 32 million rubles. The lack of enterprises' vested interests, an irrational and bureaucratized system of foreign trade ties, and other such factors could of course attempt to explain these modest export growth numbers. Of course, it is all like that. However,

the main cause of this is nevertheless hidden, not in this, but in technological backwardness and, as a result, in the production of goods that do not meet today's foreign market requirements.

As for the possibilities of increasing exports due to meat and milk industry production, then one cannot but take into account that prices for this sector's goods are after all rather low on the world market. According to data of the "USSR Foreign Trade in 1987" reference book, the nation purchased livestock products abroad totaling (per ton): freshly frozen meat, 916 foreign exchange rubles; poultry, 931 foreign exchange rubles; and, butter, 332 foreign exchange rubles. Market competition for these goods is quite strong and it is no secret that the governments of a number of countries strongly subsidize both the production and the export of agricultural products. As for milk in particular, measures are being carried out to limit its production in a number of countries. Thus in the US, a government program (April 1986 to September 1987) provided for a reduction of the total number of livestock by 1.6 million head. ("Competition of the Capitalist Economy and the Main Commodities Markets in 1986," Moscow, The All-Union Scientific Research Institute (VNIKI) MVT [Ministry of Foreign Trade], 1987, p. 379).

The reorganization of foreign trade ties being conducted by the government of the USSR, concession of independent foreign market access rights to export goods manufacturers, increase of their vested interest in expanding exports, creation of joint enterprises, and expansion of republic Councils of Ministers' rights in the area of management of foreign economic ties will promote the attraction of new exports and the growth of export volume. And anyway, realistically assessing the existing situation, we must proceed from the fact that we cannot conduct a revolution in the export production sector in one or two years. We need a longer period to do this. We must also bear in mind that successful export development requires, besides good quality and acceptable prices, a finely tuned and highly organized system of sales, service (if it is equipment), and advertising requiring a sizable investment, etc. Only all of this, taken together, can help to persuade the purchaser to purchase precisely our goods and not others. Unfortunately, We did not inherit anything like this from the previous Ministry of Foreign Trade. Therefore, much in the foreign trade organization must be created from the ground floor. And as this is difficult to achieve, we can judge by the experience of Litimpeks [Lithuania Export-Import].

Besides export intensification, there is another way to balance foreign trade—reduce imports. Resorting to this, obviously, will result in a shortage of imports, and a considerable one at that, which we will become acutely aware of in many sectors of economic activity. Of course, at a certain stage import reductions will also affect the production sector, infrastructure development interests, yes and consumption. But we will not manage without

this because, without balancing imports with exports, we cannot even begin talking about any sort of territorial cost-accounting. It is true that certain hard currency receipts may be obtained for freightage services rendered by the Lithuanian Maritime Steamship Line and from foreign tourism. However, this will not solve the problem of the swift, I emphasize, swift balancing of hard currency expenditures with earnings. Since 1987, the Lithuanian Maritime Steamship Line's hard currency earnings have totaled approximately 50 million rubles and from foreign tourism, more accurately, from operation of the Letuv Hotel and certain others, 3 million rubles all told.

So what are we proposing? To renunciate territorial cost-accounting and self-financing principles, rejoice for what has been achieved, and wait to see where it leads to later? No, not at all! We must immediately transition the republic's economy to the new operating principles and, in any case during this time we must not resort to the "single legal act" described in the regional cost-accounting principles approved in Riga and, moreover, we cannot solve this within the draft resolution's proposed time periods, that is, by 1 July 1989. Such haste with unintended consequences and also consequences which have not been modeled may have a destructive impact on the whole economic organism and compromise such a serious and required matter as the transition to territorial cost-accounting and self-financing.

What should we start with? With an analysis of the state of interrelations, including of course, in the foreign trade sector. And for this we need reliable statistics and we need accountability. In particular, in the absence of information on exports and imports in hard currency prices, we will hardly be able to make a decision about introducing hard currency cost recovery and hard currency cost-financing on a territorial level. And here the republic State Statistical Commission must take the first step.

The republic's transition to territorial cost-accounting and self-financing principles must be preceded by very serious analytical work in all portions of our economy and especially in enterprises currently under union and union-republic subordination. Their transition to republic subordination, which we consider an indispensable

condition of the proposed reform, cannot be implemented on the basis of a "single act" described in the republic cost-accounting principles adopted in Riga, and it would be advisable to carry out the re-subordination gradually as enterprises are ready to function normally under the new cost-accounting conditions. When necessary, we should ensure preservation of union agencies for a definite time period, their supplemental financing (also including hard currency [financing]), and the guaranteed provision of materials.

Of course the best condition for conducting radical economic reform, which is essentially what we are talking about, would be reform of the hard currency financing system with mandatory introduction of convertible currency preceding it. Only in these conditions can prices be formed which objectively reflect the value indices, that is, an instrument would appear which would determine what it would be profitable for us to manufacture and what would be unprofitable. In my understanding, true cost-accounting is possible only under those conditions and not under conditions of prices invented by people no matter how diligently they approach price determination, the calculation of objective expenditures, and socially necessary labor expenditures and a good's consumer properties. And only these conditions can ensure the ruble's convertibility. Only under these conditions can real possibilities appear for production of truly competitive products at enterprises and those, who so diligently and unsuccessfully have called for and continue to call for manufacturing these products, themselves no longer need to be occupied with the phrase-mongering which has bored us.

The intent is to gradually introduce convertible currency, and although this intention has been declared, we do not know how long this "gradual period" will be. Therefore, we are compelled to begin implementation of reforms under today's unfavorable conditions, and precisely under conditions of voluntaristically established and outmoded prices, universally recognized inflation, mismanagement, and endless searches for new paths. Therefore it is all the more necessary, while avoiding haste, to assume as the basis of proposed decisions not only the desire but the comprehensive accountability and analysis which must also become the guarantee that the proposed new forms of economic management will provide positive results.

## AGRO-ECONOMICS, POLICY, ORGANIZATION

### Legal and Practical Aspects of Leasing Agricultural Land

#### Leasing Terms Defined

18240145 Moscow SELSKAYA ZHIZN in Russian  
28 Feb 89 p 4

[Unattributed article: "A Normal Contract and a Lease"]

[Text] N. Globus from Kalgun writes: "Lately we have begun to meet the words contract, lease, cost-accounting, self-financing... It seems to me that they are occasionally used thoughtlessly and out of context. For example, a normal contract and a lease are not always differentiated. And in my opinion, these are different things. Or am I mistaken?"

As we all know, we are completing preparation of a special all-union act (this will obviously be a Law of the USSR or a USSR Presidium of the Supreme Soviet Decree) in which we will provide a more complete definition of leasing and lease terms in agricultural production. But existing legislation also permits us to differentiate a so-called lease contract from a normal one. Article 64 of the Fundamental Civil Legislation of the USSR and the Union Republics states that, by agreeing to a contract, a contractor is obligated to complete definite work at his own risk in accordance with the client's task from the client's or the contractor's own materials, and that the client is obligated to receive and pay for the completed work.

As we can see, this is a remunerative and bi-lateral agreement (two parties take part in it—the contractor and the client). Socialist organizations, cooperatives, and citizens may participate as both clients and contractors.

Before we compare a contract agreement with a lease agreement, let us say a few words about leasing itself which is more frequently called rental property in civil law. According to an agreement, one party (the landlord or lessor) is obliged to make rental property available to the other party (the leaseholder or tenant) for temporary use for payment (Article 53 of the Fundamental Civil Legislation). Two parties also take part in this agreement: the lessor who makes the property available for temporary use for definite remuneration and the leaseholder—the person (or group of persons) who acquires the right of possession and use of this property.

And now let us imagine that a citizen or group of citizens has concluded a contract agreement with a sovkhos or kolkhoz, for example, for fattening bull calves and has simultaneously leased a building, equipment, or other property from a farm. This agreement combines contractual and lease terms and from this arose the concept—lease contract.

A so-called inter-production or inter-farm lease is now more frequently used. For example, a separate structural sovkhos subdivision (a shop, farm, department) leases basic production assets. This variety of lease terms has its own peculiarities. Thus, calculation of plan indicators for such subdivisions is conducted while proceeding from the approved standards and norms of labor, material, and financial expenditures, the enterprise's plan for workload, products list, quality of production, and other factors. In other words, a system of economic norms serves as the basis for planning, regulating, and monitoring activities of leasing (contractual) collectives. Thus, a reserve fund and a wage fund are formed from the cost-accounting income in accordance with norms. This serves as a good stimulus and teaches workers a truly economic relationship to land, equipment, and resources.

#### Academician Yemelyanov on Leasing

18240145 Moscow KOMSOMOLSKAYA PRAVDA  
in Russian 11 Apr 89 p 1

[Article by A. Yemelyanov: "What will slow leasing"]

[Text] None of the forms of farming can firmly and reliably develop without having a solid legal foundation under them. And that is why the recently approved USSR Presidium of the Supreme Soviet Decree "On Leasing and Lease Terms in the USSR" is quite significant. It is the first document of this nature and a definite stage on the path of preparing a forthcoming law on this issue.

The main issue is about the relationship of leasing to ownership. Leasing is not a simple improvement of the management mechanism. This is a new socio-economic form affecting remote terms of property. Only he who really is the owner can be an owner and relate to business as an owner. Lease terms are also directed at creating those conditions when a worker in fact really feels like he is the owner.

We are accustomed to repeating: Each person among us is the owner of all that there is in the country. And he was the owner—of everything and nothing specifically.

What is the criterion of ownership and of the owner? There can be no owner of public property if you are not the owner where you work and live. But to be the owner of your own enterprise or of your own farm means to really control it and to control the results of production.

Land is the main object of leasing in the agrarian sector. Lease terms are from 5 to 50 years. The fact that kolkhozes and sovkhoses are offering land for lease and are not completely turning over control of these farms is worthy of attention. Local Soviet government agencies may regulate this process. It is true that the specific mechanism for influencing kolkhozes and sovkhoses has been set forth ambiguously. How will local agencies act if kolkhoz or sovkhos managers do not want to place

desirable land up for lease? And maybe we can turn the matter around so that kolkhozes and sovkhozes themselves can acquire land through leasing?

The development of peasant labor farming on leased land is supported in the Decree. A person can become a leaseholder from the age of 16. The problem of the socio-economic type of farming arises. Indeed, a family leased land and is working outside of the kolkhoz or sovkhoz. What type of farming is this, what kind of ownership? This is private peasant farming. It is based on one's own labor and not on exploitation. The fact that the leased land is state property does not change the essence of the matter. Even an American farmer can work on leased land. This peasant farming has private and labor ownership in all other means of manufacturing and production. It is clear that you cannot call it public. It is also impossible to relate to it as personal property since the latter does not affect the basic sphere of man's labor activity. We have manifested the new thinking in assessing the practical role of the peasant farm economy. Now we are faced with raising ourselves to the level of the new thinking in the theoretical interpretation of the socio-economic nature of this farm and ownership.

We need to fear not development of this farm but that it will not become widespread. There are quite a few reasons for this. First of all, rural residents' lack of preparedness for it, the majority of whom are accustomed to not being responsible for anything and not risking anything. The absence of small-scale farm machinery is also a major obstacle. We must take into account that the whole bureaucratic administrative farming mechanism is not receptive to this form of enterprise which is based on democratic beginnings and economic methods.

In the legal sense, the Decree consolidates the development of varied forms of management on the basis of leasing and lease terms. We must assess any form based on one criteria: how it promotes developing productive forces, increasing the food supply, and forming a considerate land owner. If some form helps to resolve these problems, then it is working for perestroyka.

#### Local Leasing Problems

18240145 Moscow ARGUMENTY I FAKTY  
No 10, 11-17 Mar 89 p 3

[Article by K. Popsuyenko, former kolkhoznik, veteran of war and labor, CPSU member since 1945, Lvov: "What Will Leasing Be Like in the Village?"]

[Text] As we all know, leased farms are being established in the countryside mainly within the framework of failed kolkhozes or sovkhozes and not in place of them. Will leaseholders make it better? Of course not, since management salaries make up a significant portion of extremely high lease payments.

What can a failed kolkhoz or sovkhoz give to a leaseholder when its cash register is empty, it has unpaid bank debts, there is no fodder, cattle are hungry, sick, and barren, land is thickly overgrown with deep-rooted weeds and shrubbery, and farm machinery components have been disassembled or are broken and the same for transportation assets.

I propose the following for saving the land and remaining cattle of the farms being broken up: immediately register all land being poorly worked or not being worked at all and the corresponding domesticated animals; logically distribute the animals on farm plots; announce a competition for use of these farm plots in all of the country's newspapers; quickly pass a law for transferring these lands to farmers for perpetual use; empower banks to begin preferential financing to farmers; for Gosstab [State Committee for Material and Technical Supply], assign limits to farmers, on a priority basis, for gas, fuel, and equipment at fair prices, building materials, etc.

People often ask: Why do we have so few leaseholders and why is this movement so unpopular? The answer is very simple: 1. Who generally wants to become a kolkhoznik and a member of a failed kolkhoz in particular? 2. Where is the guarantee that tomorrow, at the [kolkhoz] chairman's whim, the lease agreement will not be cut short (will not dispossess the kulaks)? 3. Why is the leaseholder to be dependent (even in minor details) upon a sovkhoz chairman or director who has made a mess of things up to now? 4. And, finally, what will this give the country? It is really clear to everyone that the leaseholder will not survive long under these conditions!

Let all of you prospering kolkhozes and sovkhozes live and be healthy but we need to immediately eliminate those failed and chronically unprofitable farms in order to save the land and put it back into production. I think that millions of working people from the agricultural industry offices, from the shops (children and grandchildren of the kulaks), from the institutes, demobilized servicemen, and graduates of military academies, technical secondary schools, and PTU [vocational and technical schools] will become free farmers. This will be the beginning of the rebirth of our agriculture.

A recent "AiF" [ARGUMENTY I FAKTY] article relating how the Soviet Union's peasants, freed from the yoke of the period of "war communism," were already feeding the country two years later (for the first time since the Civil War!) and additionally sold 150 million poods of grain abroad...

But the situation we have now is really different than it was in 1923. Why are things not working out? And all because as usual we tie ourselves to backward Stalinist dogma on agrarian issues. We need to decisively free ourselves from all elements of the horrible legacy of Stalinism, especially in the organization of agriculture.



### Local Leasing Problems Continue

18240145 Moscow ARGUMENTY I FAKTY  
No 14, 8-14 Apr 89 p 1

[A. Gridnev, Dnepropetrovsk Oblast: "What is Hindering Leasing?"]

[Text] Many have proposed that we only need to permit personal use of land and we will be inundated by those desiring to obtain it. But this is not taking place: the NEP [New Economic Plan] is not being repeated now. We have determined quite a few reasons for this. If earlier we could plow a field with a draft animal, now we cannot get by without a tractor. And what is the quality and price of this tractor?.. Really, kolkhozes and sovkhozes were not receiving so many tractors and combines for no reason, but in order to have the opportunity to carry out repairs. And can I, the leaseholder, really make such purchases?

In my view, what people are saying is sensible: Let Gosstrakh [Main Administration of State Insurance] insure leaseholders and farmers in case of lack of spare parts. Then there will be a guarantee that the farmer will not become the loser.

### Payment Arrangements for Leased Land Discussed

182840118 Minsk SELSKAYA GAZETA in Russian  
23 Feb 89 p 2

[Article by V. Krestovskiy, director, BelNIIEP APK; and N. Starovoytova, senior scientific associate, Sector for Internal Economic Accountability and Wages: "Land Has Its Price"]

[Text] Land leasing in our country was introduced during the first years of Soviet power and abolished in 1930. It should be noted that the lessors were for the most part poor peasants; middle peasant farms were leased. The lease payment was negligible.

The problem of leasing land has once again become timely. But it is developing under new conditions and on an entirely new qualitative basis. To be sure, this process is impeded by a large number of inhibiting factors. They include confusing the "leasing of land from its owner—the state" and "leasing land from its user—the kolkhoz or sovkhoz."

The nationalization of land in our country means that the state is the sole subject of the right of ownership of land. It alone defines the rules governing the possession and use of land.

Art. 11 of the Constitution (Fundamental Law) of the USSR states that "the land, its minerals, waters, and forests are the exclusive property of the state." Thus only the owner of the land—the state in the person of local Soviets of People's Deputies—can be the lessor. This

means, as many agrarian scholars note, that all agricultural land, regardless of the party to whom it may be assigned, must be declared the object of a lease and on the basis of a lease contract must be conveyed to those desiring to use it. Any legal body, be it a sovkhoz, kolkhoz, cooperative, an individual family farm, or other organizations must have an equal right to lease land.

It should accordingly be noted that the part of Art. 12 of the Constitution of the USSR stating that "the land held by collective farms is secured to them for their free use in perpetuity" should be amended. This article of the Constitution of the USSR contradicts the recently adopted Law on Cooperatives in the USSR, which provided that agricultural cooperatives situated in the relatively better zones shall make rent payments to the state. The specific form and the source of these payments have not yet been defined. Payment for land or land tax correspond most closely to the nature of land rent.

Payment for land commensurate with the quantity, natural quality, and location of the land is of great political, economic and moral significance. When land use was "free" and "in perpetuity," the state had neither legal nor economic grounds for establishing "mandatory deliveries" or mandatory planned production targets. The establishment of payments for land will make it possible for the state, as the owner of the land, to systematically regulate the development of kolkhoz production on the basis of long-term lease contracts which by mutual agreement of the parties specify all terms connected with the assignment of agricultural land to kolkhozes (size of payments for land for a given period, quantity and quality of products sold to the state, etc.). Relations with sovkhozes may be organized along similar lines.

It has now become common practice in the nation's agriculture to lease land from the land user—kolkhoz, sovkhoz (sublease), which is a reform of internal economic production relations relating to the use of the land and to increasing the interest of workers in the results of their labor.

The literature and the recommendations on lease relations do not clearly distinguish between the two types of leases. Consequently, the size of lease payments and the principles underlying them are also unclear.

A number of recommendations propose that the land lease payment be calculated as the difference between the valuation of the product in purchase and accounting prices. Thus, the recommendations of USSR Gosagroprom state that the land lease payment shall be based on calculated profit per hectare of land. They also state that there may be no fixed lease payment for the use of land and other means of production transferred by kolkhozes and sovkhozes to contract collectives, families, and individual citizens. In this case, the lease payment is the

difference between the contract prices for which lessees sell their produce to kolkhozes or sovkhozes and the prices for which the produce is actually sold by the farm.

The lack of methods for determining land lease payments causes unsubstantiated deviations in their size and evokes the dissatisfaction of the lessees. Thus the lease payment per hectare of land leased from the "Partizanskiy kray" Kolkhoz and "Zarya" Sovkhoz in Soligorskiy Rayon in 1988 was 246 and 287 rubles, respectively.

The "Semeynyy" cattle fattening cooperative was established on the "Leninskaya iskra" Kolkhoz in Orshanskiy Rayon. In order to provide its own inexpensive fodder for the livestock, the cooperative decided to lease 20 hectares of land from the kolkhoz. However the kolkhoz set a very high lease payment for the land and the lease proved disadvantageous to the cooperative.

Our calculations show that the land lease payments set by the "Leninskaya iskra" Kolkhoz were unduly high. Thus the average profit per hectare of agriculture land in 1983-1987 was 145 rubles; in 1987—232 rubles, whereas the lease payment was set at 317 rubles.

All this attests to the urgent need to develop more sophisticated methods for determining land lease payments.

The approaches to determining the substantiated magnitude of the land lease payment may vary. The principle that is based on the payment of the price (valuation) of a farmed area of land for the period of active labor of one generation of farmers is evidently the simplest of them. The duration of this period may be set at 25 years.

In this variant, land is, first, evaluated as a resource. This requires that actual profit for 3-5 years be divided by the capital investment effectiveness norm equal to 0.08.

Second, the monetary valuation of land as a resource according to the methods described above is increased by 0.5 percent annual interest paid by Agroprombank for 25 years (the term of the lease), i. e., by 1.133.

Third, the lease payment is determined by dividing the monetary valuation of the land, taking bank interest for 25 years (the optimal lease period) into account.

How should the above-described methods be used? We will clarify this point on the basis of the following example.

Let us assume that profit per hectare of kolkhoz farm land in 1984-1988 was 302 rubles. A hectare of land is valued as a potential resource in agriculture production at 3775 rubles (302: 0.08). The monetary valuation of the land as a resource is increased by the 0.5 annual interest paid by Agroprombank for 25 years on funds on deposit. This sum will be 4277 rubles (3775 rubles X 1.133).

The lease payment of 171 rubles (4277 rubles: 25) is arrived at by dividing the valuation of the land and taking bank interest for the period of the lease (25 years) into account.

It has already been noted that 25 years is the most acceptable lease period. Given this period and bank interest, 56 percent of the profits will go to making the lease payment and 44 percent will be left to the lessees for expanded reproduction.

Bank interest on enterprises' and organizations' deposits in our country is the lowest in the world. However this interest cannot be substantially increased because even with 3 percent annual interest and a 25-year lease, more than 100 percent profit must be used for the lease payment.

Since various plots of land may be leased, it is essential to find ways of determining the profit that is actually obtainable from this land. One method could be to distribute profit according to the yield of feed units. The number of feed units obtained from all farm land is determined. The share of feed units for cultivated land and other farm land (hayfields and pastures) on the basis of which profit is distributed is established.

In a word, the size of the lease payment for every specific lessee must be calculated on the basis of the lessor's indicators. In real lease relations, these rates may be taken as higher or lower with the agreement of the parties. It is not advisable to recalculate and revise lease rates more often than every 5-10 years.

## Discussion of Land Ownership, Leasing

### Aspects of Lease Law

18240051 Moscow IZVESTIYA in Russian  
15 Feb 89 p 2

[IZVESTIYA Roundtable led by Igor Abakumov and Valeriy Gavrichkin: "The Land Awaits a Master/How We View the Lease Law"]

[Text] In preparing for this conference we turned directly to leasees and enterprise directors with the questions proposes for discussion. We generalized the responses received. In this way we had more participants in the "round table" than presented on the first page. Moreover, our collocuters through "correspondence" have expressed very interesting opinions. Here, for example, is the point of view of workers of Dmitrovskiy Sovkhoz near Moscow:

"Before deciding the question of leases, a broader question should be asked: Whose land is it today anyway? Who is its caretaker? If we answer honestly, then today we must answer that the land has no caretaker..."

[Editors] A caretaker will not appear as a result of talk alone. It is evident that radical decisions are needed.

[Bashmachnikov] Today more and more scientists and specialists are speaking out about the need for radical agricultural reforms. The idea is expressed in the slogan, "Land—to those who cultivate it!" In other words, the farmer must become the landowner.

I will clarify. The landowner is not just a man working the soil by assignment or for someone else. He is the full manager, the managerial subject. Today the owner of land is the state, and the main managerial subjects are sovkhozes and kolkhozes which have received land from the state for their use. But after all as we know, they are managers not according to the entire spectrum but only half-managers or even less.

Today attempts are being made to extend broader rights to them. But it appears that even after kolkhozes and sovkhozes receive the full range of economic independence the administration still remains the manager. It will remain this way as long as lease and subordination relations exist between the administration and collectives or individual peasants. Our goal is to eliminate the alienation of the peasant from the land and from other means of production.

Of course, kolkhozes and sovkhozes, especially the economically strong, can continue to be the joint landowner. But they are faced with the same problems—how to bring the collective or specific worker closer to the means of production. The fact is that in work on the land the integration of executive and management functions is an objective necessity. For the division of labor into executive and management is replete with instances in which something gets done, something else does not, something is delayed and as a result we lose many products. In other words, bureaucratic elements in the lateness of detachments and in lease relations are unavoidable.

In this way if we set our goal realistically and not rhetorically—land should be for those who cultivate it—then, we feel, considering our own and historic foreign experience, the rights of the landowner should be awarded either to primary labor artels such as today's brigades and links but which have been transformed and made more precise in terms of composition or to working peasant families.

#### Won't the Lessee be Called a Kulak?

[Editors] But our "corresponding" discussion members are expressing doubts, which can be summarized in the following way. Are there many families here that want to farm?

[Bystrov] I must say that right now there are really few people who want to lease land. And why? Look at the conditions under which not even leasing but lease contracts are offered today! Give up all your produce, prices are what we tell you they are, pay rent for the land although the kolkhoz itself does not pay rent to the state...

Secondly, many people remember and most know how collectivization was carried out. Recently I was in Siberia, in Chita Oblast. The deputy chairman of the oblagroprom [oblast agro-industrial association] showed me a large village. Here are the facts: 80 of its residents died during the war, and during collectivization 120 of its families were repressed. Human memory is alive and today no one wants to participate in leasing, fearing that suddenly tomorrow someone will say, "You are a kulak, a kulak's henchman."

[Uzun] It is an important point, one that must be touched upon in particular. I support radical agricultural transformation. And considering this from this point of view I am convinced that the preamble to the Lease Law must clearly single out a resolution on the political rehabilitation of peasants as a class.

It was with our schoolbooks that we assimilated the idea that the peasantry was a class that did not fit in not only with socialism but even with capitalism because it was a remnant of the feudal structure. Consequently, since it was from the time of feudalism then naturally it could not reproduce anything but capitalist relations, meaning that there was no place for it in socialism. During the 1920's and 1930's people were frightened by the idea that if a peasant were allowed to remain he would bring in capitalism. First one kulak would hire one or two workers, and then it would be dozens and hundreds. Here you would have your restoration of capitalism. Such predictions were common among scholars during the late 19th and early 20th centuries. In this country this was the theoretical basis for the act of forced collectivization.

And now let us look at world historical experience. Show me a country in which a kulak or capitalist farmer has hundreds of hired hands. The total of such people is less than 10 percent in many countries. This means that the prediction did not materialize. Consequently, we must turn away from dogma and admit that the peasant-landowner is a normal phenomenon.

[Editors] I would like to remind you that the reasons that peasants actually did not allow capitalism into the village were studied with characteristic thoroughness by Aleksandr Vasilyevich Chayanov. As he asserted, the matter lay in the specifics of agriculture, which was based on biological processes. Nature itself determines the necessary optimum beyond which the physical possibilities of man and his technical equipment make horizontal production expansion inefficient. Vertical expansion is another story—it is possible to very effectively cooperate in sales, processing and much else. But uniting horizontally...For each form of activity there is a reasonable limit. We feel that the low work effectiveness of our kolkhozes and sovkhozes can be explained to a large extent specifically by the violation of reasonable limits.

[Uzun] Leasing is attractive because it puts everything in its place. In this case there just appears to be a subdivision of enterprises. Actually, leasing will enable the peasant to return to the land and to really cooperate in areas that can actually be combined for the mutual interest.

Moreover, an analysis of the experience of successful agricultural reforms which have been carried out here as well as in other countries bring us to a simple conclusion—they were only successful when the peasant really received the land.

[Editors] It is enough to recall the land reforms of the turn of the century. The flow of resettlers to the new lands then was probably no smaller than to the virgin lands.

[Uzun] It was greater. At that time 3.5 million people resettled in the eastern regions (moreover, an overwhelming majority stayed there). They received as much land as they were capable of working. In only 10 years one-fourth of peasant families left communes and received land.

Also after the revolution success was guaranteed by the fact that the peasant received land—state land, church land and land confiscated from landowners and kulaks. Incentives were provided for cooperatives. Emphasis was placed on the peasant family household. And this yielded results.

In my opinion, in the Lease Law a special article should fix the right of the citizen or of an artel to receive land. Please understand—not the right to give, but the right to receive. Only on the basis of this kind of right will it be possible to secure all the other conditions.

[Editors] Leasees ask how the land question will be dealt with. Will land be free or must it be paid for? Over what period of time? Who is competent to hand it over?

[Bashmachnikov] History knew two forms of land ownership—private and cooperative. In our country the land is nationalized.

As for the other means of production—technology, buildings, livestock and other things—in my opinion the transfer of these items to private individuals or families and to groups or cooperatives is possible and in many cases is essential already today. As concerns land...Denationalization is inexpedient. History has shown that as the landowner the state can, in the name of society, transfer land as rental property while retaining the landowner and while retaining the right to confiscate a portion of the surplus product for use in the interest of society. There should be only one criteria for transfer—the effectiveness of utilizing national resources.

How should land be transferred—for payment or free? The arguments in this area are heated. For example, I heard, "How can they transfer the land, which they took from us, back to us for payment?"

Still, my personal opinion is to transfer it for payment, and not so much so as to confiscate a portion of the surplus product for general national needs as to increase the responsibility of landowners. This is why payment should not be symbolic but serious, effective and inspiring the landowner to work conscientiously. For the state rent payments will serve as the source of means for many purposes, including improving soil fertility.

Another point has to do with the lease term. Today there is talk about leasing by the year, for 5 years, and per crop rotation...All of these are obviously incomplete formulas. Since the state retains the right of the landowner and we are talking only about rent, it is essential to create conditions for the landowner-leasee in order that he develop feelings equivalent in many respects to those of a real owner. Only the right to sell land and the possibility of deriving non-labor income should be excluded. Consequently, for working families the duration of the lease should be established for the remainder of one's life, as lawyers say, i.e. for the duration of a working life. Also, continuance of the lease contract with the heir should also be planned for on a preferential basis if, of course, the heir proves his ability to carry on the job and grow. A cooperative or work artel should be given land for the period of its existence.

[Yefimov] It would not hurt to consider that the farm model, the antithesis of work paid by the day, presupposes the mandatory integral nature of management. In such a household things must be done from start to finish. We in our experience of lease relations often break the wholeness of the complex. Let us say, one collective rents a livestock farm and another provides the feed. Here is the source of ineffectiveness.

Incidentally, in Western farming we misinterpret too much. It is said that there the farmer is the owner of the land, of the technology and of the products produced, which he can dispose of as he will. But this is not quite correct.

According to my data, in the U.S.A., for example, half the farmers utilize rented land—this is about 40 percent of all land. But of this land only 14 percent is cultivated by pure renters; the majority are farmers who have their own land but still also rent additional land, thereby expanding their production possibilities. In addition about one-third of landowners-leasees are related to the landowners. You understand the fine point—the father, let us say, rents land to his son, making him a partial leasee and then an owner.

Nearly always, equipment is rented on a long-term basis—for the complete amortization period. There is a monetary rental payment as well as a payment in kind



(up to half the collected yield). Regulations are widespread according to which landowners together with leasees decide what to produce in what volumes and what resources to utilize.

In other words, we should not have a simple attitude toward leasing—divide the land and that is all. It is no sin to borrow another's experience.

[Uzun] We should also take our purely "domestic" conditions into account. I again have in mind the most basic—the right to receive land.

#### **Both the Kolkhoz and Farming; People Have a Right to Choose**

Having provided the right to receive land we probably must also give the peasant the opportunity, having received his allotment, to decide for himself whether to leave the sovkhoz or kolkhoz or to remain in this cooperative union.

[Semenushkin] As for the family lease variant, I would not make it absolute now. Too much water has passed under the bridge. After all, concentrated complexes that operate fairly well have developed and the technology and essential mechanisms for them are available. We should not break this all down now.

Let us look at a livestock raising complex where 20-40 people are working—this is already 15-20 families. After all they also can rent the complex and the land. An artel or cooperative is created. In my opinion, a sovkhoz, kolkhoz and even an agricultural combine can be a leasee. In our country there are very different zones and conditions and for this reason many variants are objectively essential.

Today subleasing has been confirmed in actual fact—enterprises have become leasers. Is this proper? I do not think so. The rayon soviet must act as the leaser in the name of the state. It should be given this right on behalf of the Soviet authorities and also it should be provided with the corresponding economic keys—the right to sign contracts, to provide incentives for production of necessary items through rent payments, taxes and prices. Only then will it be possible to talk about the economic basis of rent relations. Relations between the leasee and the soviet must be flexible, plastic. The attitude should not simply be, "Here's a piece of land for you with such and such a fertility" (which incidentally no one has ever established precisely); there has to be a market element for leasees with regard to land assessment and payment for it.

In other words, I would not rush with the Lease Law. We must gain experience.

[Bystrov] In principle I cannot agree with Mikhail Ivanovich concerning the fact that we should delay the Lease Law. The condition of our economy and the

acuteness of the food problem force us to be energetic. We have sufficient national experience in agricultural development, including the rich experience of the 1920's.

Here before me are the materials of a discussion of three law drafts which were given to the Academy of Sciences for examination on 26 June 1926 by order of Sovnarkom [soviet of people's commissars]. The drafts contained ideas about peasant work use of land and leasing. But in 1929 we set off on a path that did not accept such ideas at all. This is why if we applaud the experience and generalizations produced in the 1920's by our honest Marxist-agronomists we can formulate some basic positions on the problem which we are discussing today.

Let us understand what a lease is. This is the transfer of property by the owner or titular owner to another owner according to certain conditions.

In reality what do we have? We have the section on so-called intra-enterprise rent relations contained in the recommendations of USSR Gosagroprom [State Agroindustrial Committee] and VASKhNIL [All-Union Academy of Agricultural Sciences imeni V. I. Lenin]. But after all these are common work or membership relations. What kind of equality can there be here if power is concentrated on one side and on the other side there is only one thing—subordination? (Incidentally, such relations are quite thoroughly regulated by the law that is in effect now and there is no need for the development of any sort of double regimen). In other words, in essence, today relations that are not really lease relations are passed off as such. And if we expect to yield results from the fact that this utopia has been realized, we are fooling ourselves and in a matter of time we will have to return to this problem and say that we followed the wrong path.

For this reason let us immediately agree that the extension of the lease law is completely unsuitable for so-called intra-enterprise contract and other traditional labor relations.

[Editors] Are the sovkhoz director, kolkhoz chairman, or even the entire structural system beginning with the rayon agro-industrial association and ending with the union Gosagroprom interested in developing real renting?

[Bystrov] On the basis of personal observations and general theoretical understanding I am convinced that the interests of the administrative system and those of peasant-leasees are diametrically opposed. Millions of managers within the Agroprom system do not especially want leasing. If leasing exists this means that the gigantic management pyramid is not necessary.

Further. In order to seriously speak about the development of rents we must accept one indisputable thesis as the foundation—the allotter of rented spaces must be the rayon soviet of people's deputies acting in the name of the state. But I feel that it must not just sign the

agreement but, as a fully-empowered representative of the property owner, it must also make allocations of state deeds for land ownership on the basis of the property title. This is the document that will protect the peasant. For the document to be provided by the kolkhoz chairman or sovkhoz director would be essentially improper.

[Editors] Here we should probably deal with the many questions relating to the theory of ownership.

[Bystrov] We put too much trust in the idea that state property, and in particular land, will be more advantageous than capitalism and will almost automatically result in abundance. This is not the case. Even Marx noted that if the property owner who has land and legal authority to be in possession cannot satisfy his material interests as a result of mismanagement or for other reasons, nothing changes in real life just because he is the owner. This is the situation in which we find ourselves.

In my opinion, in retaining the right of state ownership of land as an unshakeable right another problem has to be dealt with today concerning the legal guarantees of independence of the producer. In other words, the landowner should not interfere in the sphere of economic production operations of the peasant—be it a collective or individual producer. Lenin's dictate not to dare to command protects first and foremost any producer or manager.

[Editors] Thus you are posing the question of the official recognition of the multi-structural nature of our economy and of the legal equality of all elements?

[Bystrov] Yes. In addition to state and cooperative forms of management a third structure must be developed—individual peasant labor management. We do not have to turn to America for experience. In the laws of the 1920's, in the land code of 1922 and in the projects implemented in 1926 the idea of the individual working peasant enterprise was brought forth. It must be legalized. There can be no question here about whether to give land to the peasant or not. Regardless of whether he wants to remain within the collective enterprise or to work individually, give him a land allotment. This must be a guarantee. If he wants to create a small cooperative, still give him the land—you are obligated to do so. The decision of this problem should not be left up to the discretion of the kolkhoz chairman or sovkhoz director. Maximum favor should be created for all forms of management. In other words, there should be complete freedom in the selection of forms of management, the principle of free will should exist and there should be no coercion or violence.

I say this because in some places peasants have been "driven" into renting even though not everyone understand what this is. There is not a little arbitrariness on the part of managers. We must clearly determine the list of reasons under which the lease contract can be cancelled.

[Editors] No matter what our attitude is to what is going on in the village today, judging by the letters and responses of our "corresponding" collocutors the process of developing rent relations is already in progress and it is bringing out many new problems.

[Semenushkin] Yes, things have not yet come to radical agricultural reform (there aren't even many supporters of this yet), but we do have experience. And if the kolkhoz or sovkhoz today has real economic power and soviets still have not been entrusted with it then perhaps for a start today's lease variants will still play a role.

[Bashmachnikov] I studied this question. I will say that there are examples in which relations genuinely close to rent relations are developed between the enterprise administration and labor collectives. Here are their characteristics. The means of production are transferred to leasees by decree for a long period of time and for payments that are on the level of amortization deductions. The leasee has the right to independently select his production structure and channels for selling his products although he plans his operation with the participation of the administration. The surplus product here is used for his personal consumption and to "acquire" farm or cooperative property. In this case, of course, the kolkhoz or sovkhoz is transformed into a voluntary union of leasees. Here in effect we have not the beginnings of a state enterprise with radical administrative subordination but the beginning of cooperation and the possibility of leaving the cooperative.

The second variant is rent contracts—something transitional between contracts as a hiring system to leasing. Here the leasee receives an assignment concerning production volume and the sales channels are determined for him from above. Also important is the fact that he sells his products not according to some kind of made-up price but according to the full sales price. He disposes of the profits himself and by means of deductions maintains the management apparatus for the enterprise.

[Editors] If these characteristics are present this means that the lease contract exists—is that so?

[Bashmachnikov] Yes. But unfortunately this is quite rare in practice. More often we come across a camouflage variant in which common contracts, i.e. hired-worker relations, are hidden behind the name of lease contracts and covered by the cost-accounting form with purchases and sales. Here the contract collective is the manager not of the cost-accounting income but only of the wage fund according to the wage rate and portion of resources economized on. Retained is the previous subordination of the collective to the administration because it pays the wages of the contractees instead of having them support it.

### There is Danger in Camouflage

It is possible that the form is effective. But we must precisely separate the chaff from the grain. This kind of "lease" is just a step forward in the development of cost accounting. Nothing more. And for administrators it is a means of more quickly reporting on "total leasing"—of surviving without basically changing anything radically. On this path lying in wait for us is the danger of discrediting the idea of leases by showing the inconsistencies in something that...is not even leasing.

[Yefimov] This is a very important distinction! I feel it is necessary to add that although legally a plan is not given to enterprises at the present time, look at the kolkhoz and sovkhoz. On the left it has the processor, on the right—the client; above—the RAPO [Rayon Agro-Industrial Association] and all with 100-percent assignments or state orders. It is clear that under such conditions no real leasing and independence can exist.

[Uzun] And another thing—I want to return to the idea of leasing free lands, let us say in the Non-Chernozem Zone. In order for things to be successful we need a thought-out state program here. How can we not remember the turn of the century again? Not only a system of payments and the construction of roads and arrangement of lands in the place of resettlement but also in treeless regions—logs for houses and even stakes for fences were due to the resettler in exchange for the hardships he would experience.

[Bashmachnikov] I know that right now a program is being prepared to settle the Non-Chernozem Zone; its variants are already being discussed. In particular, historical experience is being studied carefully—what should be built in the new place, and there such places exist everywhere. Should we have enormous settlements like in the virgin lands? My opinion is that as an experiment or even on a large scale—depending on the specific situation—we should plan settlement and production objects of the farmer type. In other words, we must not just campaign to recruit farmers, who will either be there or will not, but in deed to facilitate the development of a new sector, a new structure in the Non-Chernozem Zone, to develop a material base for farming. I feel that in terms of economizing on people and other resources this kind of path is very efficient.

Incidentally, a precedent for this does exist. About six years ago when the question of what system of vegetable farming to develop in the new lands of the Apsheronkiy Peninsula was being decided an inter-national competition was announced. And a splendid variant was proposed with a consideration of western farming—the building of "family" hothouses, the settlement and everything else with the subsequent development of a cooperative of the Chayanov type. But no one accepted this, everything remained on paper and people were even afraid to show it—it was considered sedition. I think it is time for this idea to return too.

[Editorial comment] It is no accident that our discussion about the Lease Law turned to the revival of the Non-Chernozem Zone. These are two subjects that are closely linked to each other. Sometimes one hears mutually-exclusive judgements. Some say that there is no demand for land and that there is no proposal—they say that kolkhozes and sovkhozes which have this land in perpetuity do not want to give it up. But in the Non-Chernozem Zone there isn't even anyone to give it to. We simply cannot do without an influx of people from outside, and particularly of city dwellers, here. But a person from the outside will not make the decision to radically change his life, to set off without the corresponding guarantees. And a kolkhoz that is falling apart will hardly entice him.

A Lease Law, moreover a law in which there is a political declaration on the rehabilitation of the peasantry as a class—this kind of legal guarantee is capable of inspiring many in whom the peasant business techniques are still alive. So the Non-Chernozem Zone is that same touchstone on which the political, economic and social edge of the new legal document can be sharpened.

It is possible that the thoughts expressed at our "round table" are not indisputable. But there is no doubt that they are socially useful.

### The Peasant Question

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[Interview with Vladimir Bashmachnikov, doctor of economic sciences, by Kapitolina Kozhevnikova, columnist for LITERATURNAYA GAZETA: "Land, Lease and Man"]

[Text] It is not the first time that this fervent "peasant question" arises in the sharp turns of our lives. Today everyone is discussing it because with the passing years our store shelves are not becoming richer. And although demandingness here is toward those who ship, store and process agricultural products, still the main reason for the unsolved food problem lies in the village itself with its difficult history and complicated family life.

Why isn't the peasant becoming the genuine master of the land? What is interfering with normal interrelations? How will the lease system of relations alter the functions of the kolkhoz and sovkhoz?

We are inviting everyone who is concerned about the fate of the village to participate in our new column, "The Peasant Question."

[Kapitolina Kozhevnikova] The food problem arose in our country immediately after the revolution. Since the 1930's it has become chronic. For a long time a diagnosis could not be made. What haven't we done! Kolkhozes were enlarged, they were transformed into sovkhozes, and small and not so small settlements were condemned.

The private plot was displaced. This was forbidden, that was forbidden, and as a result the person who was born and worked on the land ceased being its manager. Now it is clear that this was the main reason that the country was forced to buy grain, butter, tomatoes and many other things abroad...

Vladimir Fedorovich, you are an expert on the new forms of agricultural labor—collective and family contracts, leases. A great deal is being written and said about this now. Still a great deal remains unclear. We are forced to travel an unbeaten path. And to some in their fright it seems that this is a deviation from socialism.

[Vladimir Bashmachnikov] The alienation of the worker from ownership of land, the means of production, management and the sale of products—here is the main reason for our many years of problems in agriculture. To revive the master of the land, or more precisely the master of production on the land is no easy task, why not admit it. For a long time we tried to inculcate this feeling in the worker, who simply could not be the real master. What is a master? In the old words this is a person who runs a farm independently. Clearly, he must be invested with a real right to select the type of operation according to his own viewpoint and based on his economic interests, to independently organize production, to find the best technology for himself and finally to freely dispose of the products of his labor and his attained income. It is important to secure the economic foundation for the master.

[Kozhevnikova] What foundation do you have in mind?

[Bashmachnikov] So that the individual himself is responsible for the end results of his work, and not only when things are going well but also when they bring are unprofitable. Yes, he should take risks! Since you are the master then please answer for all your actions. But in this case you are legally not subordinate to anyone and you do not need anyone's permission or orders. The most serious and complicated here for us is the right to control the land and other means of production.

Foreign experience, historical and contemporary, shows that the genuine master is the owner of land and production tools. In our country the land is nationalized. And today many are asking whether this order should be retained or perhaps, as in the West, the land should be transferred into private or cooperative hands? In a number of socialist countries, as for example Poland and Yugoslavia, the principle of private work ownership of land is in effect. But many economists are proposing a compromise point of view—in order to guarantee the rights of a genuine master it is not mandatory to carry out denationalization. While maintaining the state function of land ownership, the right to control the land and the means of production can be given to sovkhozes, kolkhozes, small cooperatives and families. History has found a good form—the transfer of land by leasing. For us, we can say, it is a fortuitous find—we do not have to

reject the revolutionary transfer of land to ownership by all the people and we can avoid alienation from the land of the solid peasants who work it.

[Kozhevnikova] Here we have moved to the main subject of our discussion. After all, the exacting attention of the entire country is riveted on lease relations in agriculture at the present time. We can probably already draw some kinds of conclusions?

[Bashmachnikov] First of all it is important to establish what to consider as genuine leasing. A family, let us say a farmer family, or a cooperative, i.e., a number of families who create their own artel, which are somewhat similar to the first kolkhozes, has rented some land from the state. Moreover, it is for long-term use and for a certain rental payment. It has received the status of genuine master and all the necessary total rights. It is working the land independently and selling the product using those channels which it feels are most advantageous. It distributes income as it sees fit and according to future plans. This type of lease system is just being born here. But already today we can see that under such conditions the peasant is able to tap his possibilities to a larger extent.

[Kozhevnikova] It seems to me too that this kind of form is more fruitful than a simple contract system for a year or two.

[Bashmachnikov] I think that the future is with the small cooperatives and family enterprises which cooperate voluntarily among each other. I do not yet know what their proportion will be, but I am convinced that they will occupy an important place in our agricultural practices. Such cooperatives already exist in many areas of Russia. Near Moscow I know they exist in Stupinskiy and Zagorskiy rayons. The number of farmers is growing, though slowly. Such enterprises are administratively independent. This is why the level of labor productivity, land use and intensiveness in livestock raising is more often than not higher there than on the average in neighboring kolkhozes and sovkhozes. By means of what? Primarily by means of a changed attitude toward labor. And then in these small formations there is a more precise self-government. The reserves are in one set of hands. The person on the land must manage himself. Goading from above is simply intolerable!

[Kozhevnikova] You yourself admit that such independent cooperatives and farm enterprises, and consequently, genuine leases are just being born. Then what kind of rents and experience are newspapers, radios and television reports on without end?

[Bashmachnikov] Today the so-called intra-enterprise lease contract is still being actively developed. I see it as a transitional form from hired labor in kolkhozes and sovkhozes to genuine lease relations. But we still have a long way to go to achieve the latter. Meanwhile that same



hired labor in the practice of collective or family contracts still prevails. Judge for yourselves. A large or small collective concludes a contract with the administration-work provider. The administration assigns it to carry out a sum total of work on land that is temporary assigned to it. In this great process the administration remains, as before, the manager. Even though the collective has obtained a certain amount of self-government still it is alienated from the results of its labor—it disposes only of its own wages. Recently in the organization of contracts a real step forward has been taken—wages are based not only on the quantity of production but also on expenditures for production. Collectives are beginning to trade amongst themselves according to convention. Many directors are hurrying to call this variant lease contracts. And this is not correct! Here hiring relations are retained. Collectives, including family, remain the managers only of their own wages, which are just calculated in a new manner. We still have a long way to go to leasing here.

But there are already kolkhozes and sovkhozes in which a truly revitalized form of economic relations is being used—lease contracts. In contrast to genuine leasing the subordination of the collective to the administration is retained. The collectives are still not free to select production structure and to sell finished products. But they trade not in a pre-arranged manner but in reality. They sell their products according to full procurement and contract or market prices. They are the owners of the surplus product—profits, or at least of a significant portion of profits. Expanded production leads to voluntary cooperation with other collectives. It happens that family contracts are reborn into a farm enterprise, collectives acquire the status of cooperatives, and kolkhozes and sovkhozes themselves with such internal relations are gradually transformed into voluntary associations of primary leasees. And now it is not the administration that pays wages to the leasees, but the leasees who with their means support directors and specialists. This variant is close to genuine leasing.

[Kozhevnikova] In your opinion, what enterprise has organized the lease form most effectively?

[Bashmachnikov] A unique approach was taken in Kolkhoz imeni Ordzhonikidze of Akushinskiy Rayon, Dagestan. It has been 4 years since the land and other production objects were transferred there for rental by small brigades, links and families. Each worker received many of the rights of a genuine manager and has his own bookkeeping account in which he records all profits from product sales. He sells his product independently through the kolkhoz or outside it. The earned money is used for lease payments into the kolkhoz treasury, for seed and feed accounts and so forth. Special deductions are made for the maintenance of managers, and the remaining portion is for personal use.

[Kozhevnikova] How does the kolkhoz chairman, who has basically been accustomed to unquestioning subordination, feel about this kind of situation? After all, in our villages democracy is still sleeping a deep sleep.

[Bashmachnikov] But the chairman of the kolkhoz, Magomed Chartayev, was the one who developed this form. No one forced it upon him. This enterprise is spread out—some of the land is in the mountains, some in the valley, at a great distance from each other. A system needed to be found that would become self-governing and self-organizing. The idea was born to transfer the means of production to the kolkhoz farmer—to make him the owner, so to speak, of the resulting product. The economic interest attracted the energy of the people, and things began to go. The chairman is satisfied. As he himself says, it has become more interesting to work. The director has stopped goading his workers.

[Kozhevnikova] I do not know whether we will find many chairmen who would so calmly give up the reigns of management to individual producers and leasees. After all for so long we have sung, fostered and developed the image of this kind of indestructible agricultural leader...And in my opinion the rayon administration poses not a small threat. Some say to introduce leases almost by force, without sufficient economic preparation. Since leases have become "popular" there is again this notorious "let's go, let's go," in order to look more to advantage in reports and summaries. On the other hand, we have hindrances, the lack of desire to break the remaining stereotypes, to give up the right to command.

[Bashmachnikov] In the rayon administrative link there are many conscientious workers who desire radical change. But many agricultural administrators are hindering the development of lease relations both openly and furtively. Sometimes people are refused directly but more often than not a whole barricade of unacceptable conditions are presented and the individual retreats. In Ramenskiy Rayon of Moscow Oblast several agricultural specialists were retiring. They asked to lease a parcel of land in Rodniki Sovkhoz. The sovkhoz administration agreed to this. But the administrators of the Ramenskiy agroindustrial combine, to which the sovkhoz belonged, opposed it. They found a reason and did everything so that there would be no leasees. That is the way it was. And do you think it was easy for that chairman from Dagestan, Magomed Chartayev? After all, his experience is still not being disseminated much in the republic. And the opposition is not accidental. The administrative apparatus does not want to share economic power with the leasee, and those of its workers who would like to do this are held back by severe state orders and the power of the monopolistic holders of the resources. Of course if things are going successfully and highly effectively in the enterprise even without lease relations but, let us say, under conditions of regular contracts or other forms of labor organization, if with the skilful use of wages other incentives and factors are brought in and if social problems are being dealt with, I would not insist in such cases on destroying everything.

[Kozhevnikova] But probably we cannot discount the desire of each worker, we cannot limit his choices.

[Bashmachnikov] Yes, it is very important that the kolkhoz farmer, brigade leader or link have the right to choose regardless of the will of the chairman. If he does not want to provide land for leasing, state organs must enter the picture here. At the beginning of the century a similar variant existed in Russia. When the village commune resisted and did not give a peasant an allotment for holding, he had the right to turn to the zemstvo. In such cases the zemstvo forcibly took land from the commune and transferred it to the peasant who wanted to work independently. We must foresee such a right here without fail. If an individual does not feel comfortable in a kolkhoz, he must have the right not simply to quit but to leave with a land allotment or to manage his enterprise in a voluntary union with other partners. In my opinion this right should be given to individual families, brigades and links as well.

[Kozhevnikova] We can already pose the problem in the following manner: The kolkhoz and sovkhoz do not have to be the sole users of the land. When will economic ownership end?

[Bashmachnikov] Many kolkhozes have proven their right to exist. I have in mind the strong, profitable enterprises. But the weak ones, and perhaps the average enterprises, could be disbanded. Let brigades and links acquire the right of primary artels and small labor cooperatives. Let leasees be of the farmer type. Once again I want to emphasize—we are speaking not about isolated small-scale enterprises. Based on economic expediency, they will then be able to unite and cooperate. In this case the kolkhoz as a whole enterprise with a pyramidal administration ceases its existence. What is formed is a true cooperative of independently-working brigades, links, artels and farmers. For us these are new forms of production—let them compete with strong enterprises. Only then will change, movement and the development of the village begin.

[Kozhevnikova] But who, in your opinion, must help those who wish to separate from the kolkhoz or sovkhoz. Who can break up a poorly-operating enterprise? After all the land has been given to agricultural enterprises for indefinite use and of course their administration will be an active opposition.

[Bashmachnikov] Let the soviets deal with this. They are the ones which should have the power to "cut out" the land from the kolkhoz or sovkhoz for families or collectives that wish to work "on special terms" and cooperate with other managers not in total operations but for separate functions. It is necessary to give soviets the right to redistribute land on a competitive basis not only from enterprises that have been named insolvent by the bank but also from those which are unprofitable and pay low income tax per hectare of land. In order to make sure that local soviets fulfill their function of transferring state land to genuine managerial hands actively and conscientiously it is important that land payments (rents or agricultural taxes) as well as income tax go into a local budget.

I think that it is time to cancel the so-called free use of land by kolkhozes and sovkhozes. Isn't this what gave rise to irresponsibility and resulted in a deterioration of land fertility? Kolkhozes and sovkhozes, like farmers and small cooperatives, must pay the local soviets for the land. I support economists who feel that in such cases the state must apply progressively increasing, differentiated lease rates or agricultural taxes which would hold back the process of concentration of land ownership in the hands of one large enterprise, including the kolkhoz or sovkhoz. Life has proven that in the village there are rational limits to the use of land in one set of hands. With increased size production organization becomes more complicated, management effectiveness decreases and the intensiveness of land use drops.

[Kozhevnikova] Incidentally this can be seen quite clearly using the Moldavian example. Under conditions of an unbelievable variety in relief, microclimate and differences in soils there during a given period Bodyula in the post of first secretary created enormous agro-industrial associations, gigantic orchards and so on. The result was embezzlement and a difficult ecological situation. But they are still keeping to this line even now!

[Bashmachnikov] The larger the enterprise on the land, the less effective it is, all else being equal. American scientists have studied their statistics and have discovered that production output and net income per hectare are higher on a small family farm. A large farm that systematically utilizes hired labor or a capitalist cooperative hold on in competition only because large profits accumulate in their hands. The West already has various forms of state limitations on the size of land use. We have to do this even more. If kolkhozes and sovkhozes are transferred land for economic use according to a higher rental or tax rate, the directors will decide on whether to maintain the entire area as a single economic system or to transfer a portion of the land as secondary leases to families, farms and cooperatives.

[Kozhevnikova] Based on my village meetings I know how important the lease term for land is. In most cases land is leased for 2-3 years right now. Thus people are not convinced that all of this is in earnest and for a long period of time. But the land requires enormous labor and human sacrifice. Here is what architect N. Kireychuk from Kiev writes: "Right now village leasees feel that they are temporary. Where are the guarantees that you will not be dispossessed as a kulak if you displease some local director? I think that we need to be able to use land for an indefinite period of time."

[Bashmachnikov] Of course, short-term leases will not enable us to revive the genuine master of the land. Incidentally, in countries where capitalist production

relations prevail, such as Scandinavia and England, leasing is long-term. Even with private ownership of land the government there has learned to regulate relations. In England private owners are forbidden to establish short-term leases or to arbitrarily cancel long-term leases. In this case the government is protecting the rights of society—the land must bear fruit. As a rule, the life of the lease is the lifetime. If the leasee manages his affairs badly a competition is organized and the land may be transferred to a more experienced manager.

[Kozhevnikova] Under conditions of socialism what is hindering us from giving land to an individual on a lease basis for his entire lifetime if this is what he wants?

[Bashmachnikov] In our country all the conditions exist for the government, which is called upon to protect the interests of the people and society, to determine the acceptable conditions for lease land ownership. The individual who works on the land must be, if you wish, an owner in many respects or in any case a master with full power. Lease conditions must create confidence in tomorrow and avoid the exploitative use of land. I feel that it would be useful, following the example of the KNR [Chinese People's Republic], to foresee the right of the leasee in many regions of the country to transfer the land to heirs but also to sell the lease contract with reimbursement of all expenditures invested into the fertility of the soil and structures. Of course, this is done under the control of the government so that the land does not end up in the hands of lazy people.

[Kozhevnikova] The Lease Law is being prepared. Just what is it that it foresees? What prospects will there be?

[Bashmachnikov] Today, after a discussion in the USSR Sovmin [Council of Ministers], the finishing touches are being put on the draft of the Lease Decree, which has a special section on the leasing of land. It reflects many thoughts and desires of village workers. Afterwards the Lease Law will be passed. I would not like it to reduce things to leases on behalf of the kolkhoz or sovkhaz administration. This is a half measure. It would be more correct to move toward leasing on behalf of the state and Soviet power. The government should become the basic leaser. Secondary leasing should be implemented only under its control.

[Kozhevnikova] And the main thing is to make the peasant master of the land as much as possible under our socialist conditions.

[Bashmachnikov] Yes, the person who works the land should be its master. This guarantees a creative beginning in production and this means fruitful work. The demand in the majority of agricultural revolutions was land for those who cultivate it. In 1917 we used this slogan, and the peasants were on the side of the revolution, and then by various means and different paths the peasant was separated from the land. The result was the worker hired for a daily wage who did not care about

what he was doing. We can see now that the further development of socialism depends directly on the solution to the "peasant question." This means that we must return the land to the person who cultivates it! We must return it in the form of state land allotments to primary labor formations having the guarantee of all economic rights. If we are able to implement this then there is hope that we will have enough bread, meat and vegetables.

[Kozhevnikova] We so conscientiously broke down the peasant's desire to personally master the land, to work privately in the private plot, slighted this form so much all the time that it is simply amazing how strong the power of land over man, his love for it, still is, if from this small, miraculously surviving nucleus of the private plot are now developing the lease.

[Bashmachnikov] There is a firm tie to the land in man's nature. As long as there is life on the planet peasant labor will exist. There seems to be a pull to the land, but not everyone by far wants to manage his own production. Sociologists have carried out this kind of research in Estonia and Kaluga and other oblasts. Fewer than 5 percent of villagers wish to work independently. The fact is that the economic conditions of work and life in agriculture are inefficient, completely deformed and require some kind of efficient interference. Today in kolkhozes and sovkhazes a person earns about 200 rubles regardless of the end results of production. In this case it is not necessary to make too much of an effort, to think or to take risks. After all our peasant works much less than the Western farmer. We cannot even compare labor expenditures—it is not only in terms of time, physically, spiritually and mentally that he works less. This is another reason why our lease contracts are not moving well...At the October meeting of the CPSU Central Committee M. S. Gorbachev spoke a great deal about ill-fated "wages for nothing." He showed all the incompleteness of today's labor incentives. It should be like this—if you grow a product with such and such outlays you have an income, if you do not cultivate you do not have an income! Then you are bankrupt! No wage-levelling! If you work a lot, you receive a lot. Leasing unties the hands of those who like to work, of true peasants who have always maintained our village. Let us say directly that it is not that simple to revive this kind of person. But let us look forward optimistically. Since we were able to rid the village of peasants then, now it is necessary to fill it with peasants again.

[Kozhevnikova] It can be said that today's leasing and cooperative movement in agriculture in essence is an attempt to correct great mistakes that were tolerated during the period of forced collectivization and of Stalinist repression of the most able-bodied people in the guise of kulaks and various kulak henchmen.

[Bashmachnikov] We have rehabilitated Aleksandr Vasilyevich Chayanov as an individual and as a communist. But his theory has not yet been rehabilitated. Yet it was

he who precisely substantiated the peasant path of developing small labor enterprises with subsequent cooperation. The thoughts and predictions of K. Marx and F. Engels about organizing effective agricultural production were generally, including within socialism, based without fail on the principles of concentrating and collectivizing labor and on other positions borrowed from the sphere of industrial production and did not receive complete confirmation in practice. Abroad a system of fairly small farms cooperating among themselves only in some areas is functioning successfully. In our country only a portion of these large kolkhozes and sovkhoses, these unique agricultural factories, are working successfully. In general the system of such enterprises, as one without alternatives, does not justify itself within either capitalism or socialism.

The thoughts of Marxist scholars in their time were canonized and laid as the foundation of socialist agricultural theory and practice. Chayanov proved the promising nature of relatively small, and above all family, enterprises. He did not negate the agricultural artel, but called the most important condition for their effectiveness the small number of artel members and the voluntary nature of their union on the basis of economic advantage and complete trust.

Vladimir Ilich Lenin first consistently held to the position that progress within agriculture depends fully on industrial forms of labor organization. Already in 1918-1922 with his active support state enterprises began to be widespread in the village, as did kolkhozes. But later the complicated events in Russia, the hunger and the rebellion of the peasants forced him to seriously rethink his position. To him, the first among Marxists, belong the words that so-called peasant individualism is not dangerous to socialism. Let us emphasize that this was not a tactical course calculated for the transitional period from capitalism to socialism. In my opinion, these words must be seen within the context of his call to rethink the views of socialism that had taken root among Bolsheviks during that period. Already at the end of his life V. I. Lenin intently studied the work of Chayanov and of theoreticians of the cooperative movement. The content of his article, "On Cooperation," attests to the fact that he had made a serious attempt to synthesize the position of Marxism with the basic divisions of Chayanov theory. Today the task of science consists of continuing this work begun by Lenin as concerns a new theory of agricultural relations—to take the best that is in this plan from Marxism and to find an integral tie to the ideas of Chayanov. Then we will really have a thorough and whole concept for developing contemporary agriculture.

[Kozhevnikova] Well, I think that you have responded to those who still regard our current agricultural search with distrust, who do not understand that only the reestablishment of genuine ties between man and the land will provide the opportunity to develop normal production relations within the village and a normal economic and moral climate.

**Academician Tikhonov Notes Leasing Benefits**  
*18240076 Moscow KRASNAYA ZVEZDA in Russian*  
*16 Feb 89 p 2*

[Interview with Vladimir Aleksandrovich Tikhonov, member of the All-Union Academy of Agricultural Sciences imeni V.I. Lenin, by Res Capt 3d Class K. Panferov, candidate of economic sciences and docent: "Looking Ahead to the Plenum of the CPSU CC: Rural Leasing"; date and place not given]

[Text] Questions related to the restructuring of the economic mechanism in rural areas, including development of leasing relations there, are of interest to many of our readers, as the letters to the editors indicate. We called upon Vladimir Aleksandrovich Tikhonov, distinguished Soviet agricultural scientist and member of VASKhNIL, to answer them.

[Panferov] First of all, Vladimir Aleksandrovich, we would like to dwell on the very concept of leasing, which has vanished from our vocabulary for almost 60 years and only recently, when the radical restructuring of the economic mechanism began, was it again reinstated.

[Tikhonov] Leasing, as is well-known, is when the owner of property turns its management over to another person or group of persons under contract for a specified period of time and for a certain payment. In rural areas, for example, a plot of land may be the subject of that kind of transfer. Upon becoming its possessor, the lessee himself, without any intervention whatsoever, disposes of it, farms it as he sees fit, at his own peril and risk.

The leasing of land was as a matter of fact widespread in our country during the New Economic Policy, but when the NEP was terminated, leasing was prohibited as well. It is a curious thing that even now, when leasing relations are beginning to revive once again, the previous bans against them still persist out of inertia. The provisions of the law still persist on excluding land from transactions under civil law and the prohibition against its users—kolkhozes and sovkhoses—of either transferring plots of land to anyone else or of renting it out. What is more, under the criminal code that is now in effect, such practice would qualify as a crime with all the consequences ensuing therefrom. All this, of course, is in manifest contradiction to the laws on the state enterprise and on the cooperative recently adopted, which permit work collectives to take possession of means of production.

[Panferov] It follows that the kolkhoz, which 6 decades ago replaced the private peasant farm, never really became boss on the land.

[Tikhonov] The leasing of land, as I have already said, means its transfer to someone else's control. The kolkhozes did not come into possession of it, but were given the use of it. There is an essential difference between these concepts. The user is not the master. And



as a matter of fact, the administrative-command system of the state in practice deprived the collective farms of any independence at all. The volume of production, the structure of areas to be planted, and even the intervals for performing particular farming operations were imposed on them. Nor could the kolkhoz dispose of its product as it saw fit. It also received instruction from above as to which consumer and at what prices it was to sell it. All of this had the result that the peasant lost the sense of being master on his land, he was turned into a hired worker attached to a particular farm and devoid of any motivation concerning the success of the job he did every day.

[Panferov] The transformations of the economic mechanism taking place now in rural areas must put an end to that process. What role is leasing called upon to play here?

[Tikhonov] At present, as is well-known, we are making the transition to economic methods of managing agricultural production, which indeed is also the case of the country's economy as a whole. The leasing contract is one such method. Moreover, a very effective one. After all, when it has taken possession of the land as a piece of economic property, the work collective, the family, or the individual find themselves in a situation where their property depends entirely and completely on the end results of their work. They will work in an enterprising way, with initiative, concerned about reducing costs and achieving high profitability of construction, so they do not end up the loser. And this is not just theory. The experience of a number of collectives which have leased land indicate that they have substantially raised labor productivity and reduced production cost, which is, of course, accompanied by a corresponding growth of their income as well.

[Panferov] But if the lease is such an effective method of increasing the material motivation of the peasant as to the results of his work, why has it not yet become widespread, even though the economic reform has been going on in our country for more than a year now?

[Tikhonov] There are quite a few reasons. I have already mentioned the juridical discrepancies. The mistrust of rural workers toward leasing as an organizational form of work and as a work incentive has not yet been overcome. One can in general understand this. So many experiments of every kind have been conducted in our agriculture that even the spread of the lease is sometimes perceived as just another short-lived campaign, like, for example, consolidation of the kolkhozes or liquidation of villages that "had no prospects." Here is the way people think: Is there any point in becoming lessees, of taking over a weighty responsibility, of making major changes in the entire way of life one is accustomed to, when, as they say, this is not serious and will not last long? Especially since in some places the lease is concluded only for 3-5 years, and no guarantees are given that it will be renewed in the future. Incidentally, a lease

for that period of time does not motivate the lessee at all to be concerned about the land and to improve its fertility. On the contrary, it pushes him on the road of a plundering and grabbing attitude toward the land.

The lack of confidence in leasing has resulted in many other aspects of its organization not being thoroughly worked out. No one knows, for example, what the rent on the land should be under the lease. In some cases, it is leased on the understanding that half of the output raised on it would be sold to the kolkhozes, and in other cases the entire output, and this moreover at state prices. But relations of that kind can no longer be called those of leasing. This is a simple contract to grow certain farm crops.

And where the rent is collected in money, there are cases when some kolkhoz chairman extorts such an extreme amount of rent from the lessee, also obligating him to sell his produce to the kolkhoz at state prices, that he condemns him in advance to utter destruction. And the agricultural equipment which the lessee cannot do without at all? As a rule, the kolkhoz offers him machines and implements that are already worn-out, but it demands the price that would be paid for them new.

[Panferov] How do you, Vladimir Aleksandrovich, see the ideal organization of leasing in agriculture?

[Tikhonov] The present reality of leasing relations in rural areas is such that the kolkhoz or sovkhov figures as the lessor. In other words, the lease is an arrangement within the farm. I think that there are no prospects for it to develop along that road. If only because even now there are a few kolkhoz and sovkhov managers who are ready to turn the land over to lessees, especially newcomers, not local people. And after all, why must the kolkhoz or sovkhov figure as the lessor, when, as is well-known, it itself is only a user, but not at all the owner of the land? In my view, matters should be organized differently. They must be done in such a way that leasing relations become the sole form, to which there is no alternative, of relations between the state as the owner of the land on the one hand and all those, without exception, who cultivate that land on the other, that is, work collectives of kolkhozes and sovkhovs, members of other cooperative associations, and private peasant farms.

The lessor must be the state, personified by local soviets of people's deputies, with which all these collectives and individuals would be required to conclude leases on exactly the same basis. That kind of procedure makes relations between the state and rural commodity producers simple and clear.

The state will have long-term confidence of rent on the land being paid into the budget along with approximate amounts of income tax from the lessees. The latter would in turn be assured of their right to possess the land for a long time, to shape the production structure and the scale of production, to choose suppliers of resources and

customers for their products, in short, to run the farm independently and to fully dispose of the income left to them after payment of rent and after covering production costs and making other payments. Here, the lessee must know that there are no restrictions on the amount of his income, just as on the other hand no one is going to wipe away his tears if he manages the farm poorly and is ruined.

[Panferov] Your proposal about who should be the lessor of the land reminds one of the slogan from the Great October Revolution: "All power to the soviets!"

[Tikhonov] Exactly right. Granting them the right to be the lessors will increase the prestige of local soviets of people's deputies. But that is not enough. They must also receive the rent on the land, the income tax, the fee for road use and water, and other payments. After all, at present our rayon government, especially that of the rural rayon, is poor, and that is why it has no rights. It itself has to beg funds for social purposes from bureaucrats at the upper level. And they can either give or not.

We believe that soviet power will be strong when its local authorities possess sufficient material resources. The payments referred to above comprise the basis of those resources. Deductions would be made from them at definite fixed rates and paid into the budgets of the soviets at the higher level, all the way up to the country's state budget. In other words, the proposed organization of leasing in agriculture must also be accompanied by changes in the procedure for building up our budgets: it must not go from top down, but rather from bottom up.

[Panferov] How much time, Vladimir Aleksandrovich, will be needed in your view to correct the situation in agriculture, to restructure production relations in the

spirit of the present-day requirements, and as a consequence make the counters of our food stores more attractive?

[Tikhonov] I would say this: we have every opportunity to shorten that time. And it can above all be shortened by adopting the Law on Leasing, which would make the system of leasing relations all-inclusive, not an exception to the rule, which is what it is in our country at present. That law must shatter once and for all the practice of bureaucratic command of those who work the land.

Our food shortage, you know, was not caused so much by our inability to run our farms as from the inadvisable structure of agricultural production that took shape. The entire world is traveling the road of concentrating the production of each product in regions with the climatic and biological conditions most favorable to it. On this basis, large specialized agricultural zones are shaped. In our country, every rayon is like a general store in which you find practically the entire range of farm crops. But this, you know, is incorrect. Clay, for instance, will never produce a good potato nor good wheat. But people are forced to cultivate these crops.

[Panferov] And the last question, one which is frequently encountered in letters: Does the introduction of leasing signify a departure from the principles of socialism?

[Tikhonov] From dogmatic Stalinist socialism without a doubt, from creative Leninist socialism not in the least. At one time, after all, some people referred to the productive forces that were passed on to us from the old system as all but the Devil incarnate and demanded their destruction. And they attempted to represent money-exchange relations as incompatible with our principles. There is no basis whatsoever for casting doubt on the lease: it works for socialism, for the benefit of the people.

## POLICY, ORGANIZATION

### Discussion of Social Costs, Benefits Prior to Plant Construction Urged

18210006 Moscow SOTSIALISTICHESKAYA  
INDUSTRIYA in Russian 3 Feb 89 p 2

[Article by Yu. Orfeyev, candidate in Philosophical Sciences: "If You Want To Build—Pay"; first paragraph is SOTSIALISTICHESKAYA INDUSTRIYA introduction]

[Text] Meetings, strikes.... They entered our life along with the people's awakening activity. Meetings are most often held in connection with ecological problems, or against a certain decision. The workers, students and specialists gather on the streets and in the squares to express their disagreement with the attempts to locate, in the city or in the vicinity, potentially harmful or even hazardous production facilities. This is the question, however: how does one identify manifestations of group egoism in behalf of outwardly noble purposes? And what can be opposed to it?

One can understand people who do not want a nuclear power plant to spring up right next to their apartment house: after Chernobyl it will only inspire fear in them, which is difficult to overcome. What does one do, however, when they come out against the construction of chemical, metallurgical and microbiological enterprises with such intransigence?

For example, at the demand of the community, the local authorities of Tomsk, Pavlodar, Orenburg and Svytyvkar did not agree to the construction on their territory of a biochemical plant for the production of fodder yeast. In Armenia, the construction of an experimental amino acid plant was halted. Representatives of the Ministry of the Medical and Microbiological Industry found themselves in a difficult situation: the people simply did want to listen to the assurances that it was only a question of constructing ecologically pure and safe production facilities.

The directors of many ministries and departments no longer dare to enter into arguments with public opinion. The direct developers of new technology and production facilities, however, openly express their displeasure. They even think that such protest meetings should be forbidden. Their arguments, too, should not be discarded.

Before making a decision to construct a new enterprise or production facility, a great deal of preliminary work is done. Taking part in it are hundreds of the most varied specialists, who think up a number of variants, selecting the most efficient one from the standpoint of the national economy. One might ask, why must their conclusions be doubted? Why take on trust the speculative outcries in the squares?

The opponents of "meeting" democracy have other arguments as well. Construction of production facilities "in disfavor" in a certain specific region often promises a considerable gain because of adjusted transport connections, the presence of work forces, power sources and other reasons.

"Wherever you like, just not at our place!" is often stated in the response of a representative of the community. It immediately becomes clear that behind the threatening phrases stands the recurrent manifestation of group egoism. What can withstand it? How can a conversation be led from a course of conflict to a channel leading to constructive decisions? Who should do this?

In order to answer these questions, one should look into what arouses the people to protest. An analysis shows that in most cases they come forth because of a lack of trust in the substantiation and usefulness of the proposed projects and decisions. The root of this distrust goes away in time, as when the decision was made, in secret circumstances, to construct the Baykal Pulp-and-Paper Combine, to close off Kara-Bogaz-Gol Bay and to rehandle the sewage of the Siberian rivers.

However, to be fair, it should be said that stupid decisions sometimes appear not only with malicious intent, but also because of bungling. The procedure for making them is often by no means perfect. When intending, let us say, to construct a new plant, the directors of the sector usually appeal for aid to experts. Meanwhile, our entire preceding practical experience has shown graphically that an expert is by nature color-blind, and sees the world through his own narrowly vocational glasses. While it is a question of technical, technological or organizational problems, he can verify his conclusions experimentally, by mathematical model study. Experiments related to social problems, however, are by no means always carried out. Or else they take an inordinately long time. And indeed, their results are not always unequivocal because of the fact that in different regions people react differently to the same events.

You ask, on the basis of what democratic procedures will we seek a solution to the social and economic problems? It would appear that the alternative to the former methods should be a model based on a broad dialog. It does not exclude from this process experts who represent the interests of the sector or the state. They, however, should be assigned the role only of partners in the exchange of opinions with society or its representatives. Moreover, not one of the parties in this argument should have the right to make a decision without his opponent's agreement.

Just how, in practice, should the mechanism of decision-making, permitting the interests of both sides to be reconciled, look? Let us try to investigate this. When, for example, it is a question of constructing a chemical combine, the authors of the plan should first of all demonstrate to the protesting inhabitants the entire set

of measures ensuring its harmlessness. If these measures appear inadequate or the representatives of the public are unable to evaluate them, they should have the right and opportunity to draw in their own experts.

This, however, is only one side of the problem. Whatever security measures are taken, a certain element of risk remains. Consequently, the people are within their right to count on an appropriate compensation. So far, however, the ministries have simply ignored such demands. Apparently, since the times of unemployment, they have been accustomed to think that locating any enterprise in a region is almost a blessing.

Today the situation has changed: both with respect to work conditions, from the standpoint of the prestige of a vocation, and from the standpoint of ecology, a plant producing electronics is preferable to a chemical combine. This means that to locate the latter, the inhabitants must be paid back with housing, schools, roads and kindergartens. It appears that the size of this "payment" must be talked about in advance. For this, the authors of the plan should speak honestly about the advantages promised by locating a combine in a precise region, for the ministry and for the enterprise. What part of these advantages are they prepared to share with the city. Must there be bargaining? This, however, is an element of democracy.

Not only the inhabitants of the given city, but also the authors of the project will benefit from this type of discussion. It will make it possible for them, as if from aside, to evaluate the strong and weak aspects of the proposed decisions and to introduce amendments where necessary. Conversely, they can stand solidly on their own in cases where the "opponent" could not introduce weighty arguments. In other words, the dialog with the public helps to smooth out the project carefully and to avoid annoying errors and miscalculations. Moreover, in a number of situations, this is the only reasonable approach.

Who should come forth in the role of mediator, capable of directing society's protest into a businesslike channel? The practice of restructuring itself has answered this question: the local soviets. In speaking of them, M.S. Gorbachev emphasized: "The role of the soviets lies in revealing the maximum opportunities for the people's initiative, and the informal participation of the wide masses themselves in the solutions to all problems. Through the institution of suffrage. Through public organizations and movements, with which the soviets should be in constant, close interrelation."

The prerequisites for a dialog with the public have been created by the very spirit of restructuring. The Law "On All-Union Discussion of the Important Problems of State Life" is called upon to play a large role here. Unfortunately, in this case too, things turned out overlapping. Specifically, the Law does not stipulate who and

by what criteria should evaluate: is the problem important or not? Apparently, it is for this reason that the USSR Law "On the Procedure for Appealing in Court Illegal Actions of Officials, Encroaching Upon the Rights of Citizens," was included among the secondary ones, and was not brought up for all-union discussion.

"The moral state presupposes for its members the state example of ideas, even if they come out in opposition to the organ of the state," wrote K. Marx. Our society has entered a new phase of development, where the role of the democratic institutions will steadily grow. So let an exchange of opinions take control of the culture. Let broad discussions with the public become the true instrument to produce the best decisions.

### **Khozraschet at Cement Industry Enterprises: First Steps and Problems**

*81440644 Leningrad TSEMENT in Russian  
No 12, 1988 pp 4-5*

[Article by O.V. Rybakova, chief of the cement economics department of the Main Economics Administration of USSR Ministry of Materials]

[Text] Two and a half years of the 12th FYP have passed in the framework of restructuring of the economic mechanism of enterprises in the cement industry. The branch overfulfilled the state plan for production of cement by 500,000 tons in 1986 and 1.1 million tons in 1987 (under the new conditions). The number of straggling plants has been reduced, and most enterprises have fulfilled contractual obligations, the profit plan, and the assignment for the rise of labor productivity.

Performance indicators did not improve in and of themselves. It is no secret that the percentage of wear on cement equipment is rather high—52 percent. For a long time, the branch has not been receiving the necessary capital investments to develop and update its assets, nor for social purposes. Nor in fact have the builders, for whom cement is the "staff of life," indulged us with their attention: new production lines have taken 10-15 years to build, and they refused to do work related to retooling.

The performance of the enterprises has been favorably affected by the conversion to the new economic conditions in 1987 and to self-financing in 1988.

The economic method of management, reflected in the incentive conditions adopted by USSR Gosplan in agreements with the AUCCTU for an additional assignment by raising the rate applied to form the wage fund and by increasing the size of economic incentive funds, along with the absence of fear at the local level that planning targets for the output of cement will be established on the basis of the level already achieved, without taking into account equipment that has been shut down for repairs and for the updating of assets, have made it possible to reduce the construction industry's shortage of cement by more than 1 million tons in 1987.



The USSR Law on the State Enterprise (Association) has provided an impetus for improving the performance of cement plants by reinforcing their economic condition. Collectives have shown a motivation to increase output, since it has become possible to use in the interests of the enterprise cement produced over and above the state order and centrally distributed deliveries. As a consequence, 1.1 million tons of cement were produced over and above the plan in the first 6 months of 1988.

The drafting of plans for the transition to self-financing, their fulfillment, and the teaching of the principles of economics to supervisory personnel and ordinary workers in all departments have given a definite thrust toward greater responsibility and development of initiative.

The first result of the effort made was not long in coming: stability in fulfillment of planning targets and steadiness in output have become commonplace for the overwhelming majority of enterprises. It has become possible to turn attention to the financial condition of enterprises. Plant management has been working more smoothly than ever before with economists and accountants. After all, it is they who bear the principal responsibility for seeing that the collective lives a normal life in the context of full cost accounting (*khozraschet*) and for competent substantiation of the need for resources which will provide the plant an opportunity to develop.

It cannot be forgotten that in a short time all enterprises are to live under the stringent conditions of the market. And that means that managers have no alternative—they must see that the plants have a guaranteed steady economic situation. At present, they need like air itself profitability and a high rate of profit, which are the main purpose of operation.

The financial condition cannot be stabilized immediately by any means, even though we have had occasion to work a great deal on this in close contact with the plants.

There is still unfinished business, and the commercial department has not been properly set up. Enterprises located in RSFSR alone pay 10 million rubles in fines every year for failure to fulfill conditions for product deliveries. The effort to reduce indebtedness, which has reached 8 million rubles in the main administration, is not going well. There is still a great deal of uninstalled equipment, sometimes equipment that is simply unnecessary. Intraplant cost accounting is not being conducted on the necessary level. The introduction of the collective contract is delayed. Technological discipline is low, and frequently repair work is not done up to standard. Yet these are all things we are doing for ourselves.

A number of plant managers still have not learned to count money and to use it for the benefit of their collective, to demand quality work from repair organizations as if it were for themselves, to pay bills only for

work done, to require personnel of scientific organizations to perform all the points in the contract concluded and to provide confirmation only of the actual economic benefit from the work done.

The average monthly output and remuneration of repair personnel serving enterprises of the Transcaucasus and Uzbekistan exceed by 1.5-fold the average for the branch, but the figures on the performance of the cement plants in those regions do not confirm the high quality of the repair work done, which signifies that they have been receiving unwarranted funds for repairs and that plant managers have been indifferent toward the results of the economic activity of the enterprises entrusted to them. At the same time, there has been a definite benefit in the transfer of repair personnel to the cement enterprise to perform all types of repairs. This is, of course, cumbersome for the manager, but on the other hand it is profitable for the collective. There are many pluses and minuses here; everything has to be weighed in each particular case, but cement industry people have had this kind of experience, and it has been fairly good.

The Gornozavodsk Cement Plant has incorporated the section for cement repairs, and it is hoped that this will make it possible to solve a number of problems related to production and social welfare more promptly, while at the same time the Sebyakovskiy Cement Plant felt it was more advisable to transfer the repair section it had to the PO "Soyuztsemremont."

Enterprise managers do have a desire to work efficiently, they need more competence and economic sophistication.

The decisive indicator in the context of the entire system based on full cost accounting is performance of contractual obligations. Although delivery discipline has improved by comparison with the previous period, and contractual obligations for 1987 were performed at 99.6 percent, five enterprises of Glavtsement were short more than 6 million rubles in deliveries.

The stability of plant operation since the beginning of 1988, the bolstering of the staff of supervisory personnel, and the selection and appointment of vigorous and competent people to responsible positions afford the basis for assuming that the problem of performing contractual obligations by all enterprises in the context of full cost accounting will get solved. It is very desirable to organize deliveries in such a way as not to violate delivery terms and conditions and to avoid penalties in the form of fines.

So, the paramount tasks of work collectives are 100-percent fulfillment of contractual obligations and high profitability.

Not all ways and means are good in the utilization of physical and labor resources, but only those which do not add to the production cost.

Self-financing forces us to look with different eyes at the organization of intraplant cost accounting at the enterprise and to study it more thoroughly and approach it from a position that is not formalistic, since the untapped potential lying on the surface will dry up in a year or 2.

It is through the system of effective cost accounting within the production entity that the opportunity exists for motivating both the shops and individual workers to make active use of progressive know-how, to apply scientific-technical advances, and to improve the end results of activity.

Intraplant cost accounting helps to regulate economic ties, to adjust the mechanism of intershop relations, in which the motivation for mutual benefit and responsibility to one another is being pursued more and more. Of course, there is no point in making it more complicated, but the first necessity is to be concerned with it on an ongoing basis.

The know-how and knowledge that has been accumulated has to be implemented, the habits of socialist enterprise have to be acquired, and we have to break out of the confines of stereotypical thinking so that the collective can clearly square its costs against its income, do business profitably, and make fuller use of both the production potential and the human factor. Yet there are no ready-made formulas as to how this should be done. But one thing is clear—the need to learn to use the rights accorded by the Law on the State Enterprise, because a collective vested with power is an immense force. The prosperity or decline of the enterprise will be entirely in the hands of the collective. Every article of the law needs to be used so as to work meaningfully with trading partners and not go bankrupt. It should be remembered that beginning in 1989 the entire branch will be operating on self-financing. And everyone will be looking for an opportunity to earn more money.

Workers' councils, which must become leaders not in the number of letters sent to higher authorities, but in their ability to develop worker initiative, to learn correct understanding of democratization of all aspects of our society's life, have begun to be active at enterprises. One of the main directions in the activity of plant workers' councils is combating the passivity of the broad masses.

It is evident that the councils need to promote application of improved forms of the organization of work and work incentives as well as the collective contract.

The collective contract, organized on the principles of cost accounting and aimed at motivation and independence in the use of equipment as well as in the distribution of earnings, should guarantee the highest results of work and attainment of the rated operating conditions of equipment. For example, only about 20 percent of furnaces with an area of 5 x 185 meters being used in the

branch are producing the rated amount of clinker, and additional capital investments are not needed to bring the furnaces up to rated output.

At many plants, they are pursuing a tendency to reduce the activity of the clinker, to violate the technology for grinding the cement, and they are indifferent toward the use of grinding intensifiers. And that is why the percentage of additives has not been raised from 3 to 7 percent in general construction types of portland cement and up to 15 percent in slag portland cement.

What are the paramount tasks for plant personnel at the same time a potential for increasing profit. Deficiencies can, of course, be explained in terms of the changes in mining-geological conditions and the chemical composition of the raw material, but what the plant needs is profit and only profit. If the raw material is not as good as it was, then be good production engineers, get together with branch institutes to find ways of preserving quality at the previous level; if suppliers have changed or the raw material is being delivered over a longer distance—then the management and the workers' council should think about how the losses can be made up.

There needs to be a thorough analysis of the purposiveness of the costs of maintaining the entire nonindustrial group, especially housing management and utilities. There are enterprises where it costs about 3 rubles to maintain 1 m<sup>2</sup> of housing and others where it costs about 7 rubles. The same thing is true of subsidiary agriculture, sometimes it is profitable and sometimes it loses money.

So, the first steps have been taken in the context of self-financing, and one can already say that enterprises will be able to operate efficiently, but that requires that the entire intraplant mechanism of economic activity be directed toward profitability, fairness in remuneration of labor, and a high level of ethics.

For a mature collective whose manager is motivated to carry out the program of social welfare not only from the standpoint of square meters of housing and the number of places in children's institutions, but is also attentive as to people's disposition, human relations, and development of the intellectual potential of the workers, the system of full cost accounting will be beneficial, since it makes it a right to think, to make decisions, and to be responsible for them.

Cement enterprises are now working under the first model of self-financing—normative distribution of profit, and at the same time they are seeking ways of applying the second form of full cost accounting, which is based on normative distribution of income.

The second model aims at intensive resource conservation and a growth thereby of the fund for remuneration of work, whose size depends not only on the growth of profit, but also on reduction of material costs.

Normative distribution of income requires reliable keeping of records on all expenditures, and that means an effective keeping of records on production costs. That is what has to be properly set up before the transition is made to the second model. The production cost has been adopted as the basis for determining income and the fund for remuneration of work, but without reliable records on it it is difficult to make an objective assessment of the contribution of the various shops to the end results of economic activity.

The second model imposes higher requirements as to the organization of remuneration, not only presupposes establishment of broader rights and distribution of the funds earned, but it also makes work collectives more accountable. Preparations for operation in the context of normative distribution of profit must be very thorough,

since responsibility for everything that was not well-thought-out will have to be met with wages.

Enterprise collectives have difficult and interesting work ahead in making the transition to wholesale trade and in development of the cooperative movement.

The evolution of cost accounting within the enterprise and the combination of the initiative and independence of shops and brigades with protection of the interests of the entire collective must be based on close monitoring of output and all types of costs. In this respect, the plants need more help from science than ever. Only if production and branch science have the same interests is it possible to achieve success in speeding up the development of the cement industry.

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## POLICY, ORGANIZATION

### Retail Price Reductions Supported

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[Article by Professor Ya. L. Orlov, ZIST [Soviet Trade Correspondence Institute] department chief, and Professor A. V. Orlov, VNIKS [All-Union Scientific Research Institute for Studying the Population's Demand for Consumer Goods and the State of Trade] director: "The Realities of Reform"; first two paragraphs are SOVETSKAYA TORGOVLYA introduction]

[Text] Moscow—The coming price reform is worrying literally every Soviet individual and this is natural. The most varied points of view—at times, incompatible ones—are being expressed.

What is your view of this critical problem? The editorial board addressed this question to two representatives of branch science: Professor Ya. L. Orlov, ZIST department head, and Professor A. V. Orlov, VNIKS director. They have the floor.

#### "Pay for Mismanagement" by Ya. L. Orlov

Many years ago under the conditions of the heightened shortage of food and industrial goods, there appeared the "economy of lines" concept. It is now difficult to determine to whom the priority for discovering this extremely dubious "branch" of economic science belongs. However, it has turned out to be rather tenacious—just like the lines themselves that have, alas, become a characteristic feature of our way of life.

Meanwhile no special economic knowledge is required to understand that the discrepancy between the population's demand for goods and the supply of goods is the fundamental reason for lines plaguing us. There are two ways to overcome this disparity: either increase the production of the required goods or decrease the demand for them. The first way is not a simple one. It requires not only deep structural changes in the economy in favor of the individual but also the establishment of the necessary conditions for that restructuring. The second path seems simpler at first glance. It practically boils down to a policy of raising prices, which some economists have even hastened to declare "the law of socialist economics."

As is known, the road to hell is paved with good intentions. Where can the implementation of a number of the already widely known proposals for reforming retail prices lead us?

There is no doubt that the abnormal stratification of the former management system with its pursuit of "gross output," with its expenditure mechanism and with the dictates of the producer are reflected in the retail price

system that has taken shape, just as in a mirror. This pricing system "served" the extensive type of development that led the economy into a blind alley.

Let us examine, although fleetingly (because of the "modest area" of a magazine article), the position, arguments and—to put it mildly—the slyness and frenzy of the supporters of raising retail prices for bread, meat and dairy products.<sup>1</sup>

Quite a bit has been said and written under the slogan "Low prices for those for whom they are beneficial." In particular, a redistribution of consumption is being proposed: To eliminate the shortage, take away from those who are enriching themselves on the differences between state and market prices and add to honest workers.

It turns out that it is possible to overcome a shortage and insure an abundance of goods in stores quite simply, without straining and without accelerating the production of goods and services—establish the appropriate price at a level between market and state prices. It appears that price is an accounting and technical category and not a social and political one. The price is nothing more than the game of supply and demand irrespective of the fact that we are talking about basic necessities and the standard of living of many tens of millions of people—a standard of living that you would not call high anyway. It is permissible to ask what market we are talking about: a capitalist or a socialist one? Moreover, let us remember that today even a capitalist state does not regard the "price game" indifferently; it is exerting more and more influence on the formation of prices.

Meat is accessible at state prices, and it is not only the inhabitants of "several large cities" that are acquiring it, as some maintain. One cannot fail to consider that workers and employees, pupils and students—everyone who enjoys the services of public catering enterprises—are winning from the low prices for meat products. There are about 130 million of these people. Today, approximately more than 40 percent of the marketable stocks of meat products goes to public catering enterprises.

The compensation being proposed is far from being for everyone (it is simply impossible to make up for the losses of all social groups and it is unrealistic) and is a rather poor comfort. Moreover, it gives birth to more problems than solutions.

It is necessary to remember the lessons of the past. Remember so that the past does not become the future.

The change in the price scale in 1961 (10:1) did not justify many hopes. The kopeck did not become 10-fold more expensive, and the ruble today has "grown thin" by



almost 2.5-fold in comparison with that period. At that time, the kolkhoz market did not recognize the new price level in its stores: Many fruits and vegetables remained at the previous price.

Here is another object-lesson. The largest increase in retail prices for a number of goods during recent years occurred in September 1981. It was nothing more than a voluntaristic attempt to solve the complicated and multifaceted task of balancing supply and demand and to insure the fulfillment of the commodity turnover plan. As a result, the per capita commodity turnover—a very important indicator of national prosperity—decreased the following year for the first time in all the years of Soviet power. For the first time!

The prices, which had soared, threw the buyers out of the shops. At that time, the goods themselves stood ... in line waiting for those desiring to purchase them. In a word, the result was opposite to what was expected. The imbalance in supply and demand was strengthened because that, which was very essential, did not occur—goods were not increased, the growth in the population's real incomes was reduced, and the retail commodity turnover plan went unfulfilled not only for that year but also for the next several years.

It is necessary to think in a timely fashion about the consequences of decisions being adopted—especially when we are talking about food products. When they are scarce, it would be naive to assume a neutrality of prices in the kolkhoz market. Most likely, they will grow. Both the cooperative system and individuals avail themselves of this excuse.

Such a consequence of a large-scale price increase as a reduction in the population's purchasing power and savings is being shyly hushed up.

Finally, a quite recent example: They are proposing an increase in the price for bread. It, they say, is cheap and the buyer does not respect it very much for this reason. The agroindustrial committee achieved its goal: The prices for a number of types of bread were raised. When doing this, they promised to improve the quality and variety of this everyday product considerably. The appraisal today is unanimous: The price jumped, but the quality of the bread not only did not improve but it even worsened.

After what has been said, we will pose the question: What was the basis for promising to improve quality and to expand the variety of products whose quantity does not grow? Life teaches us that the price creation caravan is following its own road—although the introduction of an anti-expenditure mechanism, which assumes not an increase in prices and expenditures but their reduction, is the most urgent task of the economy. This is a reply to those who "are confusing the issue," fighting for an increase in prices. Will a price increase raise the population's living standards? This is extremely doubtful

even with compensation. The recipe of the natural market—with a shortage of any commodity, the price rises almost automatically—is unacceptable to us.

Not only a direct but also a concealed increase in retail prices and tariffs for services occur. There are no grounds for thinking that an increase in the average retail price is caused completely by an improvement in the quality of goods. The requirements of state standards—these "guardians of quality"—have even been reduced for some food products. Nevertheless, the price has remained as before or has even increased. In this way, industry and agriculture are trying to cover the holes caused by low work efficiency.

The rebukes addressed to the people, who allegedly are in debt to the state all of the time, do not have any foundation. Of course, a debt exists, but not in money—rather it is in work and in a proprietary attitude toward public property. Unskillful management causes many enterprises to be unprofitable. As a consequence of this, the need has arisen to increase purchase prices and now, as they suggest, even retail prices. We will not develop as a result of only laziness, mismanagement and dependence. Why be concerned about the low cost of production if it is possible to set one's hopes on subsidies from the state's pocket which is essentially the buyer's pocket?

The following opinion is being expressed on newspaper and magazine pages: They say that the highly paid strata of the population will receive the lion's share of subsidies along with products. This is not quite correct. In our society, the monitoring of the measure of work and consumption is carried out based on the principle "from each according to his ability, to each according to his work." This implies that he, who earns more, will purchase more. Why should one be cunning with those who earn less? It is another matter that they really need material help, especially those who are on the verge of poverty—we have passed over this for many years in silence.

I support social justice. However, as is evident, this is understood differently. Some rightfully assume that the standard of living will depend on the amount and quality of work; others are in favor of wage-levelling which is one of the most important reasons for economic difficulties and disorders—and not only economic ones.

A real improvement in the situation, the mitigation of social tension and the achievement of significant successes in the domestic market are possible only with the radical improvement of the entire economic situation in the country. The fact that the population's unsatisfied demand, which has accumulated over the last three five-year plans, has reached an enormous magnitude—65-80 billion rubles, testifies to the scale of the problem.

Subsidies fulfill an important social function. They insure the maintenance of a stable retail price level for food products during a growth in expenditures for production. Their significance also lies in the creating of the necessary conditions for the profitable operation of agroindustrial complex enterprises. At the same time, it is becoming ever clearer that subsidies do not permit economic management methods to be fully used and that they reflect the expenditure approach to compensation for high expenses. Price reform is necessary but—chiefly—for the wholesale prices of many types of products. Concerning retail prices, I repeat, there are serious objections.

Supply and demand—these are a scale which has two cups. In order to balance them, it is necessary to influence each one of them actively—in particular, the one which is connected with money circulation and the regulating of the population's incomes. It is necessary to see to it that incomes correspond to the specific contribution of each member of society to the augmentation of the public wealth. One must rigorously observe the economically sound relationships between the growth in productivity and wages.

Many defects are concealed behind high wholesale and retail prices for goods. These are the low quality of agricultural products; the enormous losses during storage, delivery and sales; and the large non-productive expenditures on the up-keep of an inflated management staff.

One must sharply reduce the price which society pays for mismanagement and wastefulness, reduce and cease the tens of thousands of unnecessary construction projects at enterprises, and—in a word—seriously consider state budget expenditures, including those for defense.

Under shortage conditions, an unwinding spiral of inflation and a not high—more accurately, low—standard of living of many social groups, including the kolkhoz peasantry, the planned increase in retail prices for basic necessities will provide a negative effect opposite to that which is planned, and new problems and difficulties will appear...

#### **"Regulation and Not a Directive" by A. V. Orlov**

During 1988, the dynamics of the economic and social spheres were expressed in higher growth rates for produced national income, the real—especially the monetary—incomes of the population, and retail trade turnover. The continuation of this process under more balanced growth indicators has also been included in the plan for 1989. This, however, should not create the illusion of a rapid recovery of the economy and of such a part of it as the domestic market.

Our illness—shortages—is a chronic one. The shortfall that has accumulated in agriculture, the uncompensated losses in the budget as a result of mistakes and going too

far in solving the alcohol problem, and the reduction of imports have aggravated the food supply problem and have caused a wave of massive hullabaloo almost everywhere. The rumors about price and monetary system reforms and the "expansion" of cooperatives cannot explain the persistent and difficult situation with meat and the disappearance of confectionery items, coffee, tea, and many other products from sale in many places. The reasons are deeper. They lie in the structural and regional imbalance in the national economic complex and consumer market that has taken shape over the course of the last three-four five-year plans.

The low quality of many goods and services is aggravating the imbalance in supply and demand. Along with this, the growth in average retail prices, which is naturally causing an ever sharper reaction by consumers, has acquired the nature of a permanent process.

Over the last 17-18 years, average prices have risen by 37-38 percent, including 24-25 percent through structural changes. Essentially, this is a concealed and unsanctioned price increase caused by the pursuit of "profitable" products by industrial enterprises and the washing away of inexpensive varieties. The fact that the goods being offered in stores do not correspond in their variety, consumer qualities and prices to the demand of specific population groups—the elderly, young people, multichild families, etc., is aggravating this process.

The USSR State Committee for Statistics calculated an unsatisfied demand of more than 30 billion rubles in 1987 for industrial consumer goods alone and of approximately 15 billion rubles in paid-for services provided by state enterprises.

Citing the calculations of scientists, Academician S. S. Shatalin mentions a sum of 65-80 billion rubles of unsatisfied demand for goods.<sup>2</sup> In accordance with his own methodology and using a monetary income and expenditure balance, A. N. Voronov determines an even more impressive amount totaling 240-250 billion rubles that has been accumulated because of the imbalance between supply and demand for goods and services (since 1966, i.e., during the years when unsatisfied demand appeared). The author rightfully calls this amount, which was obtained without taking the falling value of the ruble into consideration, the state's debt to the population.

The initial reasons for the unsatisfactory supply lay in the lagging of labor productivity growth rates behind monetary incomes, the low dynamics of the consumption fund, and the failure to meet planning targets for increasing national income, the output of consumer goods and the expansion of the service area requiring payment.

During 1988, the growth rates and absolute sizes of the retail trade turnover were 1.5-2-fold higher than in 1986-1987. Naturally, it should have been reduced if one

did not take into consideration the unsatisfied demand that had already been accumulated. You see, the higher the purchasing activity is (trade occurs "from the wheels"), the larger is the amount of trade turnover. The more money the population expends, the more fully is the effective demand covered. This stereotype of linear thinking, however, cannot do to explain the situation that has taken shape in the market and in trade. It is evident that, in fulfilling and overfulfilling the plan for the amount and growth rates of retail trade turnover and thereby creating the illusion of economic health (gross indicators do not provide any other picture), we have nevertheless not managed to achieve success in overcoming the structural, variety and regional imbalance in supply and demand, especially for specific population groups. The danger of this illusion is that our branch and its republic links and enterprises will fence themselves off from the realities of the increasing shortage with a "produced commodity turnover plan" and, consequently, with the strengthening of their financial position. The commodity turnover plan is being fulfilled, but the dissatisfaction of the buyer with empty shelves and enormous lines grows.

The social expectations of rapid change and the naive faith of a significant portion of the people in the magic of restructuring are not commensurate with actual economic capabilities and the difficulties that have accumulated. With society's sharply increased political activity that faith in glasnost and democracy has given birth to, it is ever more implacably colliding with the barrier of a deficit market and with the slowly changing, and even worsening, trade.

A significant portion of the population has directed its accumulated assets and current income to the purchase of many goods for future use, creating abnormal consumer stocks. Stocks in retail trade have continuously been reduced. The anomaly of falling stocks is evident if one compares their decreasing amounts with the growth in the annual increase in retail trade turnover: in 1986—7.9 billion rubles; in 1987—9.4; in 1988—21.5 according to the plan and 23-24 in actuality; In 1989—22 billion rubles according to the plan.

How was this take-off—more than twofold—in the growth of retail trade turnover achieved? The physical amount of goods arriving in the trade system grew significantly more slowly. The updating of the variety and the increase in the quality of the majority of items are still far from the desired parameters and planning targets. According to the calculations of USSR State Committee for Statistics and VNIKS specialists, the increase in average retail prices assured a growth in the increase of commodity turnover by 65-70 percent and more (up to 90 percent according to individual estimates) in 1988. In particular, this is connected with the fact that its percentage with an index of "N," "OM" and "D" (contract prices) grew sharply in the production volume of light industry. The percentage of items, which

were sold in the stores of the consumer cooperative and agroindustrial systems at higher commercial prices, increased in the marketable supply of meat and meat products.

There are other elements in the composition of retail commodity turnover (for example, earnings from the sale of commodities, especially automobiles through the commission store network) which require intense attention.

In this situation, the proportion between the rates of increase in current monetary incomes and the expenditures of the population to purchase goods and services attracts attention. The monetary incomes of the population grew by nine percent during the first nine months of 1988; and commodity turnover—by six percent. The three-percent difference is creating significant monetary pressure on the market. As a result, so called unissued—in other words empty—money is formed for the population. One cannot fail to mention previously accumulated assets and capital from the shadow economy that is obtained from unearned income. One can dispute the magnitude of this capital but it is necessary to admit the existence of these assets.

In this situation, one cannot fail to take into consideration the fact that the population purchases approximately 25-30 percent of its clothing, footwear and other personal wardrobe items in a compulsory manner. This is connected with the impossibility of freely purchasing required items which would completely satisfy the consumers' preferences in price and consumer qualities. Just as with the increase in average retail prices, it is understandable that retirees (approximately 58 million people), families with many children (two million) and young families are pinched the most.

All these and many other facts, such as, for example, the low size of pensions, permit the sore points in the economy and the social tensions, which must be taken into consideration without fail during the examination of measures to implement the reforms in the price system in a practical manner—including retail prices, to be determined.

Fundamental questions are arising. Is a reform of the price system required in general? The answer here is a simple one: Profound changes in the establishment and especially in the mutually coordinated regulation of purchase, wholesale and retail prices are objectively required. They must be adequate for the changes in the size and structure of labor expenditures, for the structure of public production, for the improvements in scientific and technical progress, for the changes taking place in economic relations and the economic mechanism, and for the changes in the relationships of supply and demand both in the domestic and in the world markets. However, in what sequence should these changes be made? There is no simple answer here although the changes in wholesale prices are, as they say, not far off.

Of course, it is necessary to link them with the restructuring of planning; of the financial, credit and tax system; banking activity; and the foreign economic connection mechanism. The management system itself with its strengthening of enterprise independence and market orientation should give birth to the changes in the prices for the products of different complexes. How should this manifest itself during the transition stage and in the future? You see, the expansion of the area of market relationships will occur by building up wholesale trade volumes using the means of production, improving the role of the new commercial and innovational banks, establishing powerful wholesale dealers, and forming markets for agricultural products, technologies, intellectual products, capital, and securities.

Furthermore. Is it possible to change wholesale and purchase prices, as was done on 1 January 1983, without disturbing retail ones and preserve the growing subsidies for the agroindustrial complex and the production of children's items and a number of other goods and services? When doing this, can one not change the procedure for forming and exacting the turnover tax?

However, the question of what should happen to retail prices is an especially acute one. Carry out a once-only (interconnected with the reform of wholesale prices) reconstruction of their entire system in order to overcome completely the ever growing subsidies in the agroindustrial complex and the imbalance in supply and demand, or partially? This suggests the idea of a risky surgical operation with unforeseen consequences. Or implement another approach and another program of measures?

We will express our position. In our opinion, there are still no conditions for a large-scale change (increase) in prices for food products even with a 100-percent compensation for part of the population. Commodity and monetary relationships have still not been fully developed, complete cost accounting does not have an all-embracing nature, and there is still a long way to go to self-financing. The monopoly of ministries and departments remains and competition between commodity producers has not properly proven itself. That is why the market mechanism of self-tuning and self-regulation is not operating effectively.

The reform of retail prices should not be carried out as a simultaneous solution, but by stages. It is necessary to place the planned changes in the form of intervals for raising prices during the 13th Five-Year Plan and immediately in 1991 under the control of a plan linked to the growth of the monetary incomes (pensions, allowances, and wages) of specific population groups in the state and cooperative sectors. The process of changing (increasing or lowering) retail prices should acquire the nature of self-regulation as the market mechanism sphere is expanded, depending on concrete—regional and commodity—supply and demand relationships. It is advisable to transfer the center of gravity in regulating prices

to the level of the union and autonomous republics, oblasts and krais. Along with balancing the population's monetary incomes and expenditures, this requires the development of a supply and demand balance: at first, for goods and services; later—for the means of production; and subsequently—common balances.

The directive method of the one-time establishment of retail prices is undoubtedly unacceptable. As the market regulation sphere expands, price levels should be derived from their growing expenditures and supply and demand relationships. In this case, what does planning regulation and planning control of prices mean? The following is possible. The plan for the five-year period establishes the reference interval for changing the price of meat and meat products, for example, from 35 percent to 45 percent. During 1989-1990 and beginning with 1991, reference "brackets" will be introduced. For example, a possible increase in prices from five to seven percent is stipulated on the average for the country in 1989. Within these limits, the union (autonomous) republics and oblasts (krais) themselves will select the acceptable interval depending on the fodder balance, the product cost dynamics, the structure of the total head of livestock, the ratios of the different types of meat and poultry, the degree of movement of monetary incomes, and the different channels of sales.

The five-year and annual plans should either establish compensating additions (to pensions and grants) for population groups (retirees, multi-child families, students, youth) or organizational measures to guarantee opportunities for purchasing the required products in a certain amount at the old prices (for coupons, orders or cards).

A great deal will depend on the concrete way these measures are implemented on the spot. The consumer will collide with their realization not when reading newspapers and receiving commentaries from the television screen but directly in the store. Incidentally, orders for production (for workers) and the home delivery of goods for pensioners (disabled and sick), multi-child families and young families are the most effective forms for servicing the population when there is a shortage. These forms satisfy the principles of social justice and combine an opportunity to guarantee a certain level of consumption, public control and the overcoming of lines.

Among the primary measures for the coordinated regulation of purchase and retail prices, it is possible to single out the permissible increase in them for ecologically clean and high quality potatoes, vegetables, selective fruits, and canned goods. These products should be obtained with the help of new growing, processing and storage technologies (using new packing methods and new packaging materials). The creation of the production and the establishment of a market for ecologically pure products, which have been grown using organic fertilizers and biological plant protection methods,



requires—as foreign experience confirms—additional expenditures, especially during the initial stage. The increase in expenditures and prices is from 30 to 100 percent. However, this is exactly the case when the changes in purchase and retail prices, which correspond to an improvement in the volume, structural and variety balancing of supply and demand, are combined directly with the interests of the consumers. With reasonable limits, this regulation of prices can receive the support of the consumer movement that is being formed in our country. You see, are talking about health and a profound turn toward rational consumption.

The problem of the ecologically pure production and consumption of goods and services is, of course, wider than only the regulation of purchase and retail prices for potatoes, vegetables and fruits. With socially preferential prices, it is required that the variety of dietetic and diabetic products (using alternative types of sugar, salt, etc.) be updated and that the production level of children's food be sharply raised. At the same time, substantially increased purchase, wholesale and retail prices are permissible when creating a variety of delicatessen items and tropical fruits in a special network of stores.

The new principles should be used as the basis for categorizing self-service stores, special stores and state, cooperative, family, and individual public catering establishments. Rebates and extra charges should be established and regulated depending on the completeness and quality of the commodity variety and the services being provided.

New packaging materials, sanitary and hygiene items, unburnable dishes, and other household items as well as certain technically complicated goods are being more broadly included in the variety of ecologically clean items abroad. For example, this pertains to refrigerators, where freon is not being used, and launches, engines, pumps, passenger cars, and motorcycles that operate on new and clean fuel.

It is also necessary to talk about the need to regulate retail prices by deepening their differentiation in interchangeable products that are different in quality (margarine and butter, fresh and frozen meat, fresh poultry and broilers), when enriching the variety (through cuts and new varieties of meat and meat products), and when using new packaging and packing materials.

The intra-structural and variety flexible regulation of prices should also be done for light industry items depending on their quality, fashion (trademark), mass character, seasonal prevalence, the relationship of supply and demand that has taken shape, import address, initial raw material, etc.

These measures can include the first stage of retail price regulation. The discussion should not only concern a rise but also a reduction in the price level as the commodity supply expands. Trade enterprises themselves should make broad use of this right when establishing the commercial risk fund.

The second stage—during the 14th Five -Year Plan—will be connected with a new content for economic relationships in agriculture and the production of goods and services and with new quality in the economic mechanism.

I would like those, who are trying to overcome the subsidy system by means of directive automatism and to carry out restructuring and the reform of retail prices using the command method without having a feel for the social and political "over-heating" in society, to remember the words of N. I. Bukharin that have been discovered by us. In 1925, N. I. Bukharin expressed the following statement during a controversy on the law of socialist accumulation—it is not without interest today: "I doubt if one bold spirit has been found who poses for himself the task of raising prices all the time, from year to year and from month to month. I doubt whether there is anyone who would be able to defend such a sweet system and who would openly write such a goal on his banner. I doubt whether you would find idiots who would endure such a procedure."<sup>3</sup>

It is understandable that the tactical measures to regulate retail prices should be combined with a long-term strategy to restructure the entire price system. This strategy should rely on profound structural changes: on overcoming the overexpenditures which are linked with the poor use of capacities and equipment in industry and construction, with the enormous losses of agricultural products, and with the presence of unprofitable enterprises and enormous non-productive expenditures. There is also the active inclusion of defense complex enterprises in the work of the social sphere, economic ties in the markets of consumer products and the means of production, and the development of new waste-free technologies, technologies with little waste and ecologically clean technologies. Such changes should lead to a relative lowering of production and handling costs and to a reduction in the needless user demand provoked by overexpenditures in production (including payments of unjustified monetary incomes).

Let us sum up the results in conformity with the current period and the next one. We are linking inflation in our economy: with the unstable development of agriculture; the concealed and unsanctioned increase of average retail prices; the exceeding of expenditures over incomes in the state budget; the rates of increase in unwarranted savings in banks and in the hands of the population; the issuance of securities and issues not backed up by goods and services; the low rates of growth in commodity turnover and consumption measured physically and naturally; the worsening of the foreign trade situation; the reduction of exports; the changes in the quality of goods and services; and the sharp fall of commodity stocks in trade channels. This determines the conclusion that conditions for a one-time large-scale change (increase) in retail prices for basic food products will not exist within the next year or two. Of course, important

economic decisions, such as—for example—the establishment of opportunities to purchase apartments (this is essentially a new multibillion market), can have a fundamental impact on redistributing the population's expenditures. This will change the situation with a balance between supply and demand in the consumer market, but a great deal will depend on the speed and sequence with which these and other measures are implemented. The additional measures, which are planned for 1989 and 1990 to increase the production of food products and non-production commodities and to restructure the trade system and service area requiring payment should be fully carried out in order to insure the urgently needed social reorientation of the economy.

#### Footnotes

1. I expressed my negative attitude toward increasing retail prices in co-authorship of the articles "Who Will Pay For Mismanagement" (LITERATURNAYA GAZETA, 7 July 1988) and "Where Will the Price Pointer Swing?" (SOVETSKAYA TORGOVLYA, 4 June 1988).

2. From an interview with K. Yevgenyev, SOTSIALISTICHESKAYA INDUSTRIYA, 30 October 1988.

3. N. I. Bukharin, "Izbrannyye proizvedeniya" [Selected Works], Moscow, Politizdat, 1988, p 104.

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### FOOD PROCESSING, DISTRIBUTION

#### Kazakh SSR Leaders Discuss Republic's Food Program

18270092 Alma-Ata KAZAKHSTANSKAYA PRAVDA in Russian 9 Apr 89 p 2

[Article: "The Food Program: What City Residents Can Do"]

On 7-8 April the republic conference-seminar took place in the Central Committee of the Kazakh CP to discuss the tasks of city party and soviet organs regarding the development of the food complex and increasing the role of industrial centers in supplying the population with food products.

Participating in its work were the secretaries of party obkoms in charge of socio-economic development, secretaries of city party committees and of city districts, secretaries of party committees in large industrial associations and enterprises and directors of republic ministries and departments.

G. V. Kolbin, first secretary of the Kazakh CP Central Committee, presented the introductory speech at the conference-seminar.

V. G. Anufriyev, secretary of the Kazakh CP Central Committee, presented a report.

Speaking at the conference-seminar were: A. S. Omarov, secretary of the East Kazakhstan party obkom and the first secretaries of party gorkoms: Aktyubinsk—S. B. Zhamankulov, Balkhash—U. Zhetenov, Ust-Kamenogorsk—N. T. Nosikov, Dzhambul—S. N. Makarov, Temirtau—A. N. Katyshev, Kzyl-Orda—V. A. Dolgikh, Uralsk—V. A. Kondratenko, Pavlodar—Ye. D. Bayteryakov; secretaries of party gorkoms: Alma-Ata—A. M. Khmyzov, Chimkent—A. Tashkarayev, Karaganda—N. D. Baizbayev; G. B. Suranchinova, secretary of the Alma-Ata Plant of Heavy Machine Building party committee; N. D. Tantsyura, republic trade minister; E. Kh. Gukasov, first deputy chairman of the council of ministers and Chairman of Kazakh SSR Gosagroprom [Agro-Industrial Committee].

It was noted in the report and speeches that the practical implementation of the contemporary agricultural policy developed at the March 1989 Plenum of the CPSU Central Committee and a solution to the food problem require greater use of all reserves and possibilities, including the industrial and intellectual potential of cities, for the purpose of achieving these goals. We must achieve the radical restructuring of traditional relations between the city and the village.

We are speaking first and foremost about using opportunities for cooperation between industry and agriculture on a mutually-advantageous economic basis. This includes supplying the village with know-how and equipment, building materials and technology, and credit, carrying out construction work and rendering aid with people and mechanisms. It includes a more purposeful development in cities of their own infrastructure—ranging from enterprises of the food industry and bases for storing and processing agricultural products, to the trade network. This includes the development of auxiliary agricultural enterprises through the efforts of city residents, the expansion of hothouse and pond enterprises, and the extensive distribution of collective horticulture and gardening. Village schools and health facilities are in need of the special attention of city residents.

In other words, it is essential to implement an entire complex of measures using a new approach, at the contemporary level, with a consideration of the economic and social interests of the labor collectives of both the city and the village. We are inclined toward this kind of action precisely by our dissatisfaction with how the food program is being implemented.

Of course there has been some movement in this direction. During 3 years of the current five-year plan gross agricultural production output increased by 16 percent. The growth pace for grain has been 22 percent, potatoes—20, vegetables—8, meat—19, and milk—12 percent.

As a result there has been some improvement in the supply of the population with the most important food products. In particular, per capita meat consumption during these years increased by 9 kilograms, and milk—by 33 kilograms. Great resources have been directed into the development of the processing industry, especially meat and dairy, and into bases for the storage and processing of vegetables and potatoes. Over 100 new enterprises and shops have been put into operation and storage capacities for fruit and vegetable production have increased by 180,000 tons.

However, the achieved improvement in food supplies is still insignificant, and this requires more energetic action in all directions.

Cities must utilize their powerful potential first and foremost to improve agricultural production in the zone around cities—to strengthen the base of sovkhozes and kolkhozes specializing in raising vegetables and potatoes and in supplying milk, to expand the hothouse and pond industries and the construction of storehouses and other production facilities. The needs of the republic's cities for these types of products should be determined very precisely based on the following calculation: per citizen there should be 1 square meter of hothouses, 100—of irrigated vegetable plantations, and storehouse space for 135 kilograms. For each 1,000 residents there should be 14.9 square meters of trade area in vegetable shops. Here the following standard should be considered: one cow with a productivity of 3,300 kilograms of milk per 10 city residents and no fewer than 3 hectares of fishing ponds per 10,000 city residents.

Examples of business cooperation between industrial and agricultural enterprises in a number of regions have already shown their high level of effectiveness and, what is no less important, the mutual advantage.

From this point of view we can note the contractual relations between the main territorial administration, Kokchetavglavsnab [Kokchetav Main Supply Administration] and Sadovyy Sovkhoz, between Sokurskaya Mine and Telmanovskiy raypetskhozobyedineniye [Rayon specialized enterprise association] in Karaganda Oblast and between other collectives. In Pavlodar industrial enterprises in the beginning of the year transferred over 5 million rubles into special bank accounts for the development of sovkhozes and kolkhozes and oblagroprom [oblast agro-industrial committee] city objects. According to work results for the first quarter enterprises once again are planning to allocate resources from their profits.

Such good tendencies must be supported in every way possible and we must seek out forms of cooperation that are suitable for everyone and that have an economic foundation. Unfortunately, progressive experience is still being disseminated extremely slowly; not only most initiatives but also the majority of directive decisions are left hanging in the air. Thus, in accordance with the

directives of the July 1988 Plenum of the CPSU Central Committee it was recommended to deduct up to 10 percent of all capital investments for village development. It is not difficult to calculate the expected total contribution to the republic's APK [Agro-Industrial Complex] if total volume equals 3.4 billion rubles. But what actually happens? This sum, approved by USSR Gosplan and union ministries, is translated only into 37.5 million rubles. Moreover, more than half of the resources are the share of Pavlodar, Dzhezkazgan and Dzhambul oblasts, where insistence was demonstrated.

And how are party organizations concerned about improving the infrastructure of their cities? Can we speak about their search for additional resources for these purposes if even the capital investments allocated by the republic's Gosagroprom [State Agroindustrial Association] are systematically not assimilated? In a period of three years only one-third of the capacities for meat production, canning of fruits and vegetables, and for mineral water and non-alcoholic drinks planned by the five-year quota have been introduced; and for refrigerators—only 17 percent. Not only has a large amount of capital been withdrawn from circulation, but the city population has also not received much of that which could have been sold easily.

Thus it is necessary to darn the holes by bringing in products from outside. Last year alone we brought in almost 35,000 tons of confectionary goods, 38 million bottles of mineral water, 475 million standard cans of fruit and vegetable products and 800 tons of mayonnaise from other parts of the country. And how much production is moved around within the borders of the republic; moreover, this is of the kind that can be produced locally. This happens because many party committees and their secretaries are in poor control of the situation, do not know the problems in the production of food products and deal ineffectively with problems that have been accumulating for years.

Meanwhile, all of the cities in Kazakhstan without exception have at their disposal great reserves for increasing food production. An example of this is the experience of Tselinograd workers. In 1984 the Secretariat of the CPSU Central Committee recognized the work of the oblast party organization as unsatisfactory as regards the development of livestock raising—there were frequent stoppages in the supply of meat, milk, fruit and vegetables. But the party committees were able to sharply correct the situation. The product storage and processing base was expanded and strengthened and relations between the city and the village began to be built anew. As a result there were striking changes. In comparison with the 11th Five-Year Plan, meat production here increased by 24 percent; milk production—by 14 percent. The shelves of food stores became incomparably richer. During the last 3 years per capita meat consumption increased by 23 kilograms, and milk consumption—by 54 kilograms.

This excellent experience is deserving of overall support and dissemination. But instead of, as they say, rolling up their sleeves and beginning to work the majority of city and oblast directors prefer to constantly "extort" additional funds for food products, often speculating on the sentiments of workers and throwing the blame on central organs, saying that the latter do not provide adequate funds and that they themselves are seemingly guiltless.

City party organizations and local soviets of people's deputies can and must have an effective influence on the most rapid improvement in supplying food to their populations, on achieving a more effective return on subsidiary village works of industrial enterprises, on demonstrating genuine concern for people, and on expanding the scale of collective horticulture and gardening. Reserves here are truly enormous but they are being used very poorly. The time has come to exact strict penalties of cities for passive work in developing agricultural subsidiary enterprises [podkhoz].

In Kazakhstan there are 5,300 industrial, building and other enterprises, but only 944 of them, or one-fifth, have subsidiary enterprises. Moreover, during the past year this number has even decreased by 46. And even the return from many, mildly stated, leaves something better to be desired. On the average throughout the republic podkhozoes produce only 6.8 kilograms of meat in live weight per worker, 5.7 kilograms of milk, 4.3 of potatoes and 5.1 of vegetables.

Yet in places where the attitude toward this important matter reflects the party manner the results were much better. For example, the subsidiary enterprises of Kokchetav enterprises produce 54 kilograms of meat per worker annually. The operations of the subkhozoes of Karagandaugol [Karaganda Coal] Association are noteworthy. Here they have their own fish hatchery and an incubation shop. This is why last year the fish catch comprised over 100 tons. The directors of the association were able to supply the coal miners with three unprofitable sovkhzozes.

Many directors justify the low productivity of livestock in podkhozoes with the excuse that there is a feed shortage, which has already set everyone's teeth on edge. But does this always correspond to reality? Not by far.

Let us look at food wastes. In the republic annual resources comprise about 300,000 tons. This is quite adequate for the production of 20,000 tons of pork. But whereas a few years ago it was possible to see capacities in cities for the collection of wastes, now they are a rarity. It is no accident that the tasks established in Uralsk and Aktyubinsk oblasts are being fulfilled by only 15-20 percent. It is time to organize the collection of food wastes in every city, to persistently seek other ways to increase feed resources and to finish with the sentiment of dependency.

Many other possibilities are also being used poorly for developing subsidiary enterprises. This refers in particular to fishing. Thus, in Pavlodar and Semipalatinsk oblasts with great water reserves in 1988 the fish catch and consumption of fresh-water fish per capita equalled 500-600 grams correspondingly. In the stores of the cities of Kazakhstan the sale of fresh fish is as rare as that of oranges, lemons and other tropical treasures. This is why I can assert with complete justification that if the first secretaries of party gorkoms everywhere became the initiators of the fishing industry the situation would be different.

At the conference-seminar it was noted that the time has come to establish a specific task—to keep accounts on subsidiary enterprise production not only in terms of achieving a supply norm of 30 kilograms for meat and 50 for milk, but in terms of every city resident. In other words, we should establish the 1990 sales quota for meat in slaughter weight on a level of no less than 4 kilograms per city resident and for fish—3 kilograms.

Considerable reserves are also found in collective horticulture and gardening. The removal of far-fetched limitations and prohibitions has enabled us to noticeably improve the situation here. Today there are 654 member families in 3,018 horticultural associations in the republic. Each annually produces an average of 76 kilograms of fruit and berries and 210 of vegetables and potatoes. The addition to the family table is very substantial.

And yet the necessary attention is not being given everywhere to the development of collective horticulture and gardening. In Chimkent Oblast, for example, about 21,000 families still have not received plots, in Taldy-Kurgan—10,800, in Ust-Kamenogorsk—7,500, in Dzhambul—5,500, in Guryev—2,800, in Semipalatinsk—2,500, and in Alma-Ata—35,000 families.

The solution to many problems depends directly on the initiative and responsibility of city party and soviet organs. First and foremost this has to do with organizing their own wide-scale production of hothouse vegetables, with creating storage bases, and with preparing fruit and vegetable products for sale and processing.

If we speak about hothouses, 2 years have passed since the decision to have 1 square meter of protected ground per city resident, thereby supplying the city population with fresh vegetables on a year-round basis. This was actively supported by everyone. But as of now the problem has been dealt with only in Tselinograd and Ust-Kamenogorsk. In Alma-Ata there are already 1.4 square meters of hothouses per resident.

Or here is another problem. As long ago as June 1987 by a decision of the republic government people wanting to be involved in vegetable production were allowed, according to a contract with the government and the cooperating enterprise, to have individual hothouses with an area of up to 500 square meters. Each of them



could yield 10-15 tons of vitamin products annually. But even as of today the necessary work has not begun to implement this very important document. Effective help has not been given to those who want to acquire such hothouses. Yet their production can be organized in practically any enterprise.

In speaking about the necessity of improving the preservation of fruit and vegetable products, the speakers noted that until now many cities have not created a dependable storage base. In the republic as a whole losses of potatoes and vegetables on the way from the field to the consumer are valued at 172 million rubles. This is three times greater than the resources invested in the building of storage facilities.

We cannot continue to disdain the building of small fruit and vegetable canning shops in sovkhoses and kolkhoses and in city enterprises. It is also time to take unwavering control over the work of fruit canning plants and to achieve the effective use of their capacities. In other words, in the very near future it is essential to reject the import of fruit and vegetable canned goods from other parts of the country. In connection with this the assignment of the Kazakh CP Central Committee on the introduction annually during the time remaining in the five-year plan of new capacities for 207 million standard cans of fruits and vegetables should be considered a minimum. What is exacted if this is interrupted should be severe and strict.

The enterprises of the dairy industry must make a noticeable contribution toward improving food supplies. Does it make sense that in the republic's capital there is a severe shortage of kefir, of which only 30 grams per day per Alma-Ata resident is now produced. The situation is no better in Aktyubinsk, Uralsk, Chimkent or other cities. Almost everywhere in the republic cheeses are in short supply; there is a shortage of cottage cheese and of children's cheese curds.

A task is established: within an extremely compressed period of time to organize production of dairy products of no fewer than 20 kinds. City executive committees are obligated to confirm this minimum assortment precisely and to achieve unconditional adherence to this goal with the help of city party committees. The corresponding conditions have already been created for this. Suffice it to say that last year in the republic almost 350,000 tons of milk were produced above the plan and all of it was left at the disposal of the oblast. During the past quarter it was possible to add another 41,000 tons to the achieved level.

Special attention at the conference-seminar was given to the problems of producing and processing meat products and of improving quality. Radical changes here have mitigated the shortage of capacities. At the same time, over 40 percent of the equipment in enterprises is worn out, two-thirds of refrigerators are in damaged condition and the amount of manual labor is large.

This is why almost everywhere great losses of meat and its subproducts are tolerated. This is the reason for the enormous difference in end results. Thus, in the country as a whole 1 ton of raw material produces 1.593 rubles of commercial product, but in Taldy-Kurgan Oblast, for example, the figure is about 911, in Kokchetav—918 and in Aktyubinsk—959. If the republic were able to achieve the national index, this would have been equivalent to producing additional products worth at least 480 million rubles.

The aforementioned attests to the fact that without new construction, reconstruction and technical restructuring in the branch it will never be possible to saturate the market with meat products to completely meet demand. Here we cannot do without energetic, purposeful action, initiative and socialist enterprise. They must be exhibited in such a way as to already this year bring all enterprises to the unconditional fulfillment of established tasks. At the same time we should more optimally maneuver the capacities of the meat combine and to slaughter all livestock within the borders of Kazakhstan, thereby avoiding losses of a portion of the raw material. On the shelves of stores in each city there should be at least 10-12 types of state and cooperative sausages, 2-3 types of poultry and 2-3 varieties of subproducts in the first category and 10-15 in the second. Of course salt pork, meat pies, and liver and blood sausages should be sold on an ongoing basis.

There are also many shortcomings in the bread-baking industry. For example, the demand for small piece goods is being satisfied in the republic by only 80 percent. Little is produced in the way of cookies, crackers and bagels. There are complaints from some cities and settlements about the low quality of bread.

Confectionary production cannot withstand any sort of criticism—it constantly fails in its plan quota and improves assortment and taste qualities extremely slowly. In particular, during the last 3 years the Alma-Ata confectionary factory undersupplied the trade network by almost 2,800 tons of products. All of this gives rise to justified complaints by the population and requires the passage of urgent and cardinal measures. By the end of the five-year plan we should already achieve an annual growth in capacities within the branch of no fewer than 34,000 tons and to fully exclude the importation of such goods into the republic from outside. One of the ways to achieve this is to open culinary-confectionary shops in the place of work of citizens as well as in residential areas.

As for the work of trade enterprises, the speakers discussed their poor material and technical base. Even in Alma-Ata only about a dozen stores meet modern conditions, and about 150 are located in dilapidated, contrived buildings in which it is impossible to create normal conditions for either sellers or buyers. The time has come to sharply strengthen the building of company stores everywhere in the republic and to give trade and

public nutrition enterprises more facilities on the first floors of buildings as they come available. At the same time it is essential to improve control over trade organizations. Sometimes it happens that even the goods that exist in sufficient quantities in storehouses are not available for sale.

Cooperative trade enterprises and markets also need help. Recently they have become great sources for improving food supplies to city residents. But only 7 percent of republic markets meet sanitation standards. Consumer cooperative stores are often assigned old facilities that are practically unsuitable for use and that are located far from the traffic of people and transportation.

In emphasizing the importance of a radical improvement in party management of the food and processing industry, the speakers discussed the pressing need for a sharp increase here in the vanguard role of communists. It is no secret that the majority of local party organizations within the branch are small in number, passive and perform poorly in organizing educational work in collectives. This is the reason for the break in production programs, for the frequent violations of technological and labor discipline and for the embezzlement of socialist property. It is the direct duty of gorkoms and gorraykoms to give effective aid and support to the party organizations of these enterprises, to strive for an overall improvement in their battle readiness and activeness and to completely utilize the possibilities provided by glasnost and democracy.

The food program has been called nation-wide and its implementation must be built on the basis of the consolidation of efforts of all of Soviet society. This is why we should develop a program of food production in every city section and in every city and plan for the participation of all production collectives in its fulfillment. For example, party gorkoms together with party organizations of enterprises involved in the production of technology must unwaveringly monitor the timely fulfillment of orders of village workers for machinery and equipment, and must considerably improve the quality and reliability of these machines. We must strengthen attention toward the work of city building organizations which are fulfilling work for the agroindustrial complex. Cities can and must do a great deal to socially restructure the village, to make the transition to a qualitatively-new level of patronage ties.

Right now, it was noted at the conference-seminar, there is nothing more important for city party committees than the skilful mobilization of the party aktiv and all communists toward fulfilling the Food Program. We must radically alter the criteria for assessing the indexes according to which its fulfillment will be assessed, as was done with the development of the Zhilye-91 [housing] program. Most important must be not the "attractively" composed plans, not gross agricultural production output and not even the consumption of particular types of

foods on a per capita basis but what we actually have on our store shelves and what we do not have yet. It is on this basis that we should build all work.

If some of our directors do not understand the priority nature and extreme importance of this, they hinder perestroika in one way or another. Consequently, they cannot be considered good political workers and cannot be at the wheel of management. Under current circumstances a certain shake-up of cadres and a change in their psychology and thinking are essential. Only in this way will it be possible to activate the main reserve for acceleration—the human factor, and to achieve the most rapid and unconditional implementation of the directives of the March (1989) Plenum of the CPSU Central Committee, the goal of which is to supply workers within a short period of time with an adequate wide assortment of food products and to make these products richer and more varied. Only along this path, while solving other urgent socio-economic problems, can we count on a successful course, political reform and the restructuring of our society as a whole.

G. V. Kolbin summarized the results of the conference-seminar.

Its participants in the Kazakh SSR VDNKh [Exhibition of Achievements of the National Economy] examined the specialized exhibit of modern machines, equipment and materials that are needed by processing enterprises within the agro-industrial complex and became acquainted with the work of a number of leading industrial and trade enterprises, storehouses for fruits and vegetables and potatoes and subsidiary village enterprises of the labor collectives in the city of Alma-Ata.

V. I. Yermakova, responsible worker of the CPSU Central Committee, participated in the work of the conference-seminar.

#### **Problems in Moscow Public Catering Sector Detailed**

*18270066 Moscow SOVETSKAYA TORGOVLYA in Russian 4 Feb 89 pp 1-2*

[Article by V.I. Malyshkov, Candidate of Science, Economics, director general of the "Mosobshchepit" city production and retail complex: "Priority Treatment for the Public Catering Sector's Development: This Is What We Need" under the "View at Acute Problem" rubric]

[Text] During a press conference at the Moscow city soviet, a correspondent for a Moscow newspaper asked me: "When will the lines at the Moscow public catering establishments disappear?" I could not answer the question with a requisite degree of precision and frankly admitted it, but the reporter in her article ascribed this to my incompetence. But the problem here is considerably more complex than merely the lack of exact information on the essence of the problem, of which I was accused.

To overcome the serious gap between existing public catering in the nation's capital and demand for it the mere desire to do so is insufficient. We must change the paradoxical situation whereby a sector called upon to fulfill an extremely important social function and capable of offering a quick return on investment has been neglected.

Yes, it has been neglected. There is no other word to describe the long period of meager investment in the sector. This went on even though programs of consumer services growth repeatedly declared the need to develop the public catering sector at an accelerated rate. In Moscow, very small funds have traditionally been allocated for this sector by ministries and agencies as well as by the city ispolkom. The sector itself, due to its low profit rate, has very modest funds of its own.

Lower growth rates than in other industries of the economy have led to a situation whereby there are only 24 restaurant seats in the public food service sector per 1,000 Moscow residents, compared to the 45 seats required by the standard. Moreover, the standard itself is clearly too low. Judge for yourselves: in GDR cities, the norm is 90 seats per 1,000 residents, in Prague 100, but in reality in the GDR capital there are 109 seats per 1,000 residents and in the Czech capital 110 seats, while in Paris and Rome there are even more than that, 130-to-140 seats.

Let me also note that eating establishments in the center of Moscow, where demand for them is particularly high, are rather small, with the capacity of 70-to-100 clients, and are located in old converted spaces.

As to storage space, the current shortage there is 10,000 square meters, or 30 percent of the figure set by the standard; by the end of the 5-year plan period, it will grow to over 40 percent of the norm.

For a number of years we have been discussing the need to automate the deli and take-out industry. But what are those words worth if today in the Moscow public catering sector only slightly more than 30 percent of labor-intensive operations is mechanized?

In the output of precooked foods, finished products amount to just 17 percent of the raw materials used in their production; of those, only 5 percent are nearly ready-to-eat foods. As far as its technical level is concerned, our industry lags behind similar industries in developed countries 9-10 times.

Let us take a sober look at the situation: until the technical base and the industrialization level of the Moscow public catering sector is improved, the lines at such establishments can only be trimmed to a certain extent, but not eliminated.

I must also note that we have rejected the experience of the early years of the Soviet period. Even at the face of an extreme shortage of resources, the young Soviet Republic at the time took into account the role of the public catering sector in transforming people's living conditions and allotted it as much of its resources as possible.

In Moscow, eight cooking plants which were quite large by today's standards were built during the first 5-year plan period. In the three latest 5-year plan periods we were able to add only two similar plants: one at the food service department of the "AutoZIL" industrial complex and another in Gagarinskiy rayon.

A similar situation exists outside the nation's capital, as well. If we examine the situation in the country as a whole or in a majority of its regions and cities, the score there will not be in the public catering sector's favor, either.

This does not mean, naturally, that the material and technical base of the public catering sector has not been growing. For instance, since the start of the 12th 5-year plan, more than 400 new restaurants have opened here, with the capacity to serve 89,000 clients. Some 234 small highly specialized establishments have been set up using ground floor commercial spaces that were vacated, 46 new fast food cafes have been built, 700 summer cafe have opened and other measures have been taken so that the capacity of the open, or so-called general access, network has increased somewhat. But this is too little to be called substantive progress.

As in all other industries, perestroyka is underway in the public catering sector. But I dare say it has not yet produced noticeable results, since the mere mobilization of internal resources—however plentiful they may be—is insufficient. The lag in the material and technical base of the sector itself is far too great. Cooperative activity in the precooked food sector, where it should become the main source of precooked and nearly ready-to-eat foods for public eating establishments, has been timid.

To carry out the USSR Council of Ministers' resolution "On Urgent Measures to Improve Retail Services for the Population," which calls for the number of retail establishments to be brought up to norm by 1993, we must increase the number of restaurant seats in Moscow by 406,500, including 177,300 new seats in the open network, for which we need R871.7 million. Where can we get it? Who will give it to us?

The 13th 5-year plan will budget twice as much for the development of the material and technical base as the 12th 5-year plan. A similar increase is proposed for the contracted work budget. The comprehensive program for the development of the Moscow public catering sector for the 1989-2000 period calls for building in the next 5-year plan period 5 new deli plants and 11 school food service complexes each of which will serve 40 schools, compared to 25 schools previously. These and

other measures included in the program give cause for some optimism. Yet, they would only partially satisfy the most urgent existing needs of the Moscow public catering sector, to say nothing of achieving the goals set by the above-mentioned resolution of the USSR Council of Ministers.

But let us take a sober look at the problem: do we have any sector that does not have a similar resource crunch? Consequently, we should not think of taking funds from some putative reserves but of a redistributing funds and of using the internal resources of the sector and existing capacities more efficiently.

To help solve the problem, we must exempt the Moscow public catering sector from paying contributions to the state budget [taxes] for 5-to-7 years, until the end of the 13th 5-year plan period; the funds gained in this manner should be reinvested in the sector. As to the budget, which is already under a strain and can ill afford revenue shortfalls, it could be sustained by taxing retail trade, with its high profit margin. On the other hand, the public catering sector would make up for this preferential treatment and breaks in the ensuing 3-4 years.

I have already mentioned that the situation with restaurants is worst in the central part of the city. It could be eased if ground-floor premises, currently taken up by various offices, were vacated and given to the public catering sector. The Moscow city ispolkom and rayon ispolkoms have already passed appropriate resolutions in this matter, but those who have those premises now—various ministries and agencies—have dug in their heels and are dragging local soviets into protracted negotiations, playing for time. I think that it is time for the ispolkoms to show who is the boss in the city and to use their authority. This is being done by the Kuntsevskiy, Kalininskiy, Sverdlovskiy and some other rayon soviets.

When repairs and conversion are undertaken, we in Moscow do not always make use of the Belorussian experience of getting the cooperation of industrial enterprises. Yet, one Moscow example of such collaboration shows how fruitful it can be: with the help of industrial enterprises we produced street vending equipment to sell baked goods, cold drinks, ice cream and other products.

Another path is to alter the existing policies in urban planning. Mass housing construction in Moscow is currently taking place near the city limit, in so-called bedroom neighborhoods. There, restaurants could be built at the per capita seating proportion required by the existing standard. But those are bedroom neighborhoods, and they do not need so many restaurants; such need exists in the central part of the city. Does the Moscow city ispolkom not have the authority to apply the standard in a more flexible way all over the city,

perhaps using such measures as the attractiveness coefficient. This is a great unused resource and we must tap it, with the help of city planners and in a scientific manner, as it was done when some central microdistricts were planned.

There may also be a third path. There is a number of offices, organizations and small enterprises in the central part of the city which do not have their own cafeterias. Those who work there benefit little from the newly opened cafes, since they are geared to serve tourists and visitors precisely during the lunch hour.

One solution is to extend the hours and enlarge the cafeterias of neighboring enterprises, offices and organizations, which has been done, for instance, at our cafeteria: it now serves employees of 33 other organizations. Apparently, it is not enough to simply suggest this solution; the point is to organize it, to work out a special resolution and to oversee its implementation.

We are placing great hopes on the cooperatives: there are some 200 of them in the Moscow restaurant sector. Many of them already participate at a very high professional level in solving the food service problem. However, I am convinced that the decisive role in our sector belongs to collectives shifting to the lease contract form of labor organization.

Yet, expanding self-financing and leasing in the public catering sector (they are currently the main means of improving the quality of service) increasingly run into conflict with a kind of tax on the public catering sector and obsolete regulations that date back to the old command management system.

Thus, the sector is forced to charge prices set more than 20 years ago. This puts the public catering sector at a disadvantage compared to other industries. Let us recall how much the prices of construction materials, construction and installation works, technical equipment, transportation services, etc. have jumped. This is the true reason why public catering all over the country has stopped offering such popular items as pirogi and inexpensive vegetable and fish dishes. Who would want to make those pirogies if their official price is still 5-10 kopeeks—the same as years ago?

We are constantly being asked to provide food service at various city and rayon events, fairs, in recreational areas, etc. This entails considerable additional expenses that we must absorb under the existing system. Would it not be just to make those who order such services pay for them or to introduce a charge over the list price for bringing the service closer to the consumer?

And what about our complete impotence vis-a-vis our suppliers, a situation that became even worse after the USSR Council of Ministers' resolution No.888, dated July 25, 1988. It afforded them privileged treatment in



their business relations with us. As a result, the public catering sector bears much higher losses due to inability to serve full menus and lower cash receipts.

And another example of unbusinesslike relations: contrary to orders, meat processing plants not only do not increase the output of highly processed meat products for the public catering sector but continually reduce it. I can see their point of view: making such products is not profitable for them and causes losses. It is even more costly for us, but we have no choice since we must keep our kitchens going. We bear losses; those losses are budgeted into our plans and we get subsidies for them which come out of our own funds. Thus, sales increase but we see no actual money.

These are just a few examples of how the economics of the public catering sector are turned upside down. Putting things right would help increase the profitability of the sector and provide it with the funds it so badly needs to overcome its material and technical lag.

Naturally, in our work to improve our material and technical base we do not just sit and wait for more attention to be paid to our industry and for more

financing and other kinds of assistance offered to it—which would, above all, benefit all consumers; we are also doing everything we can in this area.

Much can be achieved—and achieved quickly—by collaborating with foreign companies and setting up joint ventures; this practice has been successfully ushered by the establishment of the Soviet-Indian restaurant “Deli” in Moscow. We are currently negotiating with more than 20 foreign partners. Recently we have signed a contract with a well-known Canadian [as stated in the original] firm “McDonald’s”; in 1989, a modern kitchen complex will be built in Moscow to supply the 60 new quick service restaurants that will be built.

I have left out such topics as the introduction of lease contracts and other progressive labor organization methods in the public catering industry, improvements in the quality and level of service and other internal resources of ours, which in reality—we are fully aware of it—could enable us to serve many more people than we now do using the same facilities, and to serve them better than we now do, and to earn a higher return, which means we will have more funds to invest in the business.

## FUELS

### Minister Dinkov Defends Petroleum Industry's Performance

18220049 Moscow IZVESTIYA in Russian  
7 Feb 89 p 2

[Article by V.A. Dinkov, USSR minister of the Petroleum Industry: "Mineral Resources and the Department"; first paragraph is IZVESTIYA introduction, last two paragraphs are editorial comment]

[Text] An economic survey was published under this title in IZVESTIYA (No. 295). It dealt with the technical policy of the USSR Ministry of the Petroleum Industry. The editors received an official reply.

The USSR Ministry of the Petroleum Industry, at an expanded collegium drawing in scientists and specialists, discussed the problem of developing the petroleum industry raised in the article by Yu. Grinko, "Mineral Resources and the Department."

It was based on unverified facts, unqualified judgments, and gross distortion of reality, which led the author to completely incorrect conclusions. The article is not aimed at solving the problems that face the sector, but misinforms the newspaper's readers.

The article asserts that of 18 operating deposits of the Udmurtneft Association, at only two were deposits calculated and approved in the USSR GKZ [State Commission on Mineral Deposits at the USSR Council of Ministers]. The rest are being developed in violation of the legislation on mineral resources, without knowledge of the geological structure, blindly, and therefore a considerable part of the raw material will be destroyed. Actually, of the 17 deposits counted on the balance of the Udmurtneft Association, 14 are being developed. The reserves for all 17 deposits have been calculated and approved in the USSR GKZ.

The author asserts that the USSR Ministry of the Petroleum Industry is disregarding a study of the geological structure of the deposits being worked, in order to "more easily achieve a reduction in petroleum extraction through an unfounded registry of reserves, by overstating them at the USSR GKZ" and in order to "conceal part of the reserves from the state and create a reserve for easy fulfillment of the plans and for obtaining unmerited incentives." The groundless nature of these statements made by the author of the article is refuted by the factual materials from recomputing the reserves of the deposits being developed and their reaffirmation at the USSR GKZ. In the three years of the present five-year plan, at the deposits being developed by the Ministry of the Petroleum Industry, according to statistical data (form TSU 6-GP), the increase in petroleum reserves was several hundred million tons. For Udmurtiya, in the last three years, the reserves were more precisely defined for four deposits, and of them the reserves for two deposits

were reconfirmed in the USSR GKZ. The total of the "secret"—2.5 million tons was recorded and considerably more added, with the reserves for one deposit changing toward the lesser and increasing for three. The total for the whole time at the Udmurtiya oil deposits being developed, after their confirmation at the USSR GKZ, increased. Therefore, if one traces the logic of the author of the article, the USSR Ministry of the Petroleum Industry is "artificially" making life difficult for itself, by increasing the reserves at the deposits being worked.

It was enough for the author of the article to chat with any unprejudiced oil specialist to be convinced that primary importance is being given to the problem of studying the geological structure of the deposits and an objective estimate of the reserves at the Ministry of the Petroleum Industry, since this is the basis for the sector's activity (incidentally, just as for any other extracting industry).

It is precisely due to the painstaking study of the geological structure of the deposits in the process of drilling out and operating, and more precisely defining and improving the technology of the development, along with the knowledge of the structure of the deposits and constant introduction of new technology for development that Soviet oil field workers have been able to achieve their advanced positions.

The procedure existing in the sector for technological planning guarantees drilling not of a "sparse" or "dense" network, but of the number of wells optimum for a specific oil project, substantiated by technical-economic calculations.

Yu. Grinko writes of the possibility of increasing the yearly extraction of oil at the deposits being worked, without considerable capital investments, by 100 million tons, and for Udmurtiya—by 5-5.5 million tons.

The level of oil extraction presently achieved at Udmurtiya is optimum and corresponds to the extracting possibilities of the deposits located in the development and the confirmed reserves. The possibility of a certain increase in extraction is related here to drawing new deposits into the development. Small-scale deposits, however, and their remoteness from the extraction regions, require large capital investments, with little effect.

Yu. Grinko's article misinforms the readers by asserting that the petroleum extraction is "incommensurably small in comparison with the deposits prospected." Unfortunately, this is by no means so. Suffice to say that the provision of extracting with reserves for the deposits being worked is lower than the economically substantiated one, which makes it possible for the sector to function stably.

Does not the author's statement correspond in reality to the fact that attention is not devoted to the old regions, since actually, to support extraction in these sectors, an average of 43-56 percent of all the sector's capital investments and accordingly, 50 percent of the operational drilling, is directed toward support of extraction in these regions. In the future this ratio will change in favor of the new regions because of their remoteness and the complexity of the geological mining conditions of the deposits opened there. The statements in regard to the incorrect operation of the deposits and the tendency to abandon and ruin the petroleum in the mineral resources are also unfounded.

The author of the article also calls for rejecting the introduction of new deposits into the development, feeling that "emerging onto new territories and developing new areas are advantageous to the department."

Specialists and scientists in the country know very well that at the present time all the major and high-yield deposits, because of the considerable working of their reserves, have passed into the stage of reduced extraction, even though they continue to be worked at exceptionally high rates.

It was said above that, both from the standpoint of technology and the provision of oil extraction with reserves, the deposits being worked cannot ensure levels of oil extraction that satisfy the needs of the national economy. Under these conditions the only possible method of stabilizing the growth of oil extraction is to put new reserves into operation.

The author of the article is completely wrong about the fact that developing new regions is advantageous to the sector. On the contrary, developing new oil territories, which as we know, are located in remote and uninhabited oblasts with severe climatic conditions, requires huge expenditures and forces.

Also highly dubious are the discussions by the author of the article on the expediency of selling crude oil "for dollars." The sale of oil, as we know, is dictated by the conditions that formed in the preceding years and, in our opinion, this is not the path for which the appeal should be made.

On the whole, Yu. Grinko's article "Mineral Resources and the Department," as was noted at the collegium by all those speaking, is unobjective and incompetent, and contains a large number of incorrect judgments and conclusions. It is characterized by a lack of relevant criticism, by the substitution of labels for conclusions and ascribes to oil workers low intentions and frank stupidity.

The collegium evaluated Yu. Grinko's article as insulting, leading society into error and not directed toward a solution to the problems facing the sector.

The USSR Ministry of the Petroleum Industry will be grateful to the editorial colleagues of IZVESTIYA for objective clarification of the problems of development of the oil industry and of concealment of the shortcomings and difficulties taking place, as well as for help in overcoming them.

#### Editorial Comment

The reader has probably noticed the solid time gap between the publications of the survey and the official reply. This is not the fault of the ministry—IZVESTIYA received its reply in the time agreed upon. The editorial office, however, received responses and articles from specialists, reflecting a point of view completely different from that in the official reply. They categorically supported the appearance of the article in our paper, which the ministry, as can be seen, so categorically refutes. Taking this into consideration, the editorial office decided to prepare a commentary on the reply made by Comrade V.A. Dinkov. Even during the process of working on the commentary, however, certain new data became known, convincing us that we were truly touching on a public and extremely complex problem, and data which required additional analysis.

Meanwhile, time passed and the deadline set for publication of the reply had already been exceeded. That is why, by restricting ourselves for the time being to this afterword, IZVESTIYA intends to return once more to the subject of the survey "Mineral Resources and the Department"—so that, based on the extensive factual material that arrived at the newspaper, and guided by the opinion of various groups of scientists and specialists, it can once again analyze the problem raised, but without superfluous emotions, in a substantiated and thorough fashion.

#### Problems, Progress on Caspian Petroleum Complex Outlined

18220078 Alma-Ata KAZAKHSTANSKAYA PRAVDA  
in Russian 3 Feb 89 p 1

[Interview with Eduard Borisovich Yugay, chief engineer of the Neftegazpromstroyproyekt Institute, by KAZAKHSTANSKAYA PRAVDA correspondents: "Why the Projects Spin Their Wheels"; Aktyubinsk]

[Text] Eduard Borisovich Yugay graduated from the Ust-Kamenogorskiy Road Construction Institute. He followed the path from foreman of the construction administration to chief engineer of the Neftegazpromstroyproyekt Institute. Today he tells our correspondents about the advanced forms of construction for the facilities of the Caspian Oil and Gas Complex. And not only about that....

Undoubtedly, the country needs oil, and it also needs natural gas. Until today, the arrangement was stable: extract the underground riches at any price and as quickly as possible. You must—means you must. They tried to do their utmost. They extracted billions. They

lost millions. The deposits were ruined as the result of their mismanaged operation. "On the way" they created extremely serious ecological problems. In accordance with the famous thesis on "economical economics," they have stunted on trifles, losing double and triple and slightly more.

I am not a philosopher—I am a practical person, for many years subordinate to the ministries and up to now working under the aegis of the department. I do not want to act against my conscience and state that now, with restructuring, absolutely everything in the sectorial policy has changed for the better. There are still steps which will, in the foreseeable or distant future turn out, as they say, badly for nature, and this means for all of us. I by no means have in mind the consequences answering the coarse, but accurate saying: "When no thunder threatens, a man does not cross himself." I am speaking of the fact that our mistakes, shortcomings and digressions—call them what you will—have a negative effect.

How should one act to have things go well, with changed social concepts of economics, ecology and responsibility for the days to come? At this stage, for myself and my colleagues, with whom I work side by side, it has been determined: we must not blindly adopt the planning decisions of institutes of any rank. Whatever authorities stand behind them or any other plan, we are obliged, having thoroughly studied the documentation presented, not to be ashamed to introduce well-thought-out and convincing corrections and improvements, oriented ultimately toward the success of the matter in general.

I recall that in the resolutions of the 27th Party Congress, the CPSU Central Committee plenums and the 19th All-Union Party Conference, one of the tasks that arose was accelerating scientific-technical progress in capital construction. It is no secret to anyone: the effectiveness of the work of the construction complex in many ways depends on the level of the planning. A few cases come to mind when, because of the "blunders" made by the planners, the pipelines left the intended direction (by dozens of meters!). This is not the question now, however. The task is of a higher order—to increase the efficiency of the seemingly good, approved planning decisions—or even of those which had no analogs in domestic practice. This was more complex, especially since the Neftegazpromstroyproyekt Institute of the USSR Ministry of Construction of Petroleum and Gas Industry Enterprises is only three years old. In just the past two years, however, we have discussed and partially worked out seven projects, including those for the Tengizskoye, Zhanazholskoye, Kenkiyaskoye and Kumkol'skoye oil and gas and the Karachaganakskoye gas condensate deposits. Despite all the problems—the lagging behind in drawing up the estimated planning documentation, the complexity of the natural-climatic and geological characteristics, the high degree of corrosiveness of the soil conditions, of the oil and the gas condensate—the institute has done quite a lot, but work is still needed for the construction workers.

Then, according to the proposal of our institute, last year preparatory work was stopped on the construction of the water-purifying structures in Kulsary. The plan was revised, using water preparation technology, new in principle. The volume-planning and structural system for the construction part of the plan became closer to optimum. The essence of the changes lay in using new industrial equipment, and incidentally, I emphasize—domestic. Furthermore, they rejected the traditional, nonindustrial structures and materials and blocked out individually standing facilities in a single wing.

In literally one quarter they solved—by agreement with the Ministry of Construction of Oil and Gas Industry Enterprises, the Ministry of the Petroleum Industry and five scientific-research and planning institutes—all the problems on replanning, supplying and using modern equipment, meeting world standards. Here are the results. Instead of the 17 months granted as a normative period, the facilities were constructed in 9 months. The economic effect was 1.3 million rubles. Now, one would not believe that relatively recently the water came to Kulsary along an old oil pipe from the drying up Amu-Darya, and that there was hardly a bucket per person per day of this water. So, because of the efficient use of the achievements of science and technology and the economic interest of all the participants in carrying out the project—the purchasers, planners and construction workers—the major facilities were put into operation ahead of schedule to provide water to the Tengizskiy Oil and Gas Complex and the population centers adjacent to it, the conditions were created for normal work, and time and funds were gained. This means that business also gained.

Analogous work on improving the planning decisions was done in conjunction with the Leningrad Vodokanal-proyekt Institute and the Engineering-Construction Institute at Mangyshlak. There the facilities for the purifying structures at Novyy Uzen, due to the revision of the initial decision, cost much less than a million rubles.

Sometimes the question is asked: does not economy turn into losses? The danger is understood. In these cases, however, there is no need to worry: highly qualified scientific forces and practical specialists have been drawn into revision of the plans, and the maximum possible results are stipulated. Once more I repeat: all the innovations adopted are based on modern achievements of science and technology.

Time moves on, forcing us to be mobile. I recall our old argument with the Moscow planners from Vodokanal-proyekt. At that time they believed along with us that the plan for purification structures at Kulsary met the modern level and there was nothing to bicker about. It is possible that the honor of their uniform was staked on



this, especially since facilities had already been constructed according to their plan (and quite well) both in our country and abroad. We, however did not agree with this statement of the problem. And we proved to be right.

Another example. At the Karachaganakskoye gas condensate deposit we began to test the plan for a ravine crossing of the gas line through the Urals. Several errors and omissions were revealed in the plan for organizing the construction. In particular, the master planners from the Yuzhniipigiprogaz Institute forgot about the roadbed at the approaches to the ravine crossing. The mistake cost neither more nor less than 730,000 rubles. We corrected it together. Here I wish to note that the planners—people, just like anyone—can also make mistakes, but it is our economic system that pays out for these mistakes. Therefore, each planner should be a person of principle—both in evaluating and correcting other people's mistakes and their own. Serving as an example in this sense are specialists such as T. Khusnutdinov, S. Yanushevskiy, A. Volodashchenko, V. Kim and N. Arkhipova. These are people working in various institutes and organizations, but they have combined their ideas of improving technical designs for one of the most important construction projects in the country.

Let us return, however, to our problems today. At present the institute is discussing a plan for the first start-up complex of the Kumkolskoye Deposit in Kzyl-Orda Oblast. Unfortunately, until recently, its thickness had been determined in various ways, and moreover, the start-up technological system had not been completed. Moreover, so far there is no planning documentation for the definitive variant of the complex. How can you build without this?

Our institute is called upon to do much more than it is doing now. The reason for its spinning its wheels lies, in my opinion, in the following factors. The first and main one—with the multitude of tasks that face us (planning, expert examination and improving the plans, introducing the achievements of scientific-technical progress, samples of the new equipment, devices for minor mechanization, new materials, technology, etc.), we do not have the necessary number of personnel in this or that specific specialty. The second factor—the problems of economic incentive have not been solved at the ministry level—not only for innovative activity, but even for thematic development. The existing norms are still oriented toward wage leveling. It would appear that these two problems are interrelated. The solution of the second will undoubtedly affect the solution to the first.

One more point—the main one. I am deeply convinced that construction of the Tengizskoye Oil and Gas and Karachaganakskoye Gas Condensate deposits, on favorable financing, with unapproved plans and incomplete work documentation, leads to disorganization and an increase in the periods to build the complexes. In my opinion, expert examination of the plans must begin

with the preplanning drafts, and then the technical-economic substantiations. Last is the working documentation. In reality, the expert examination must be fulfilled along with the work plan, when it is already difficult or too late to change anything. To make the institutes give up the earlier adopted decisions, particularly to redo the plan, is very, very difficult, of which we have more than once been convinced.

**Gas Ministry Official Answers Critic**  
*18220070 Moscow EKO in Russian No 2,*  
*Feb 89 pp 45-46*

[Article by USSR First Deputy Minister of Gas Industry R. I. Vyakhirev: "Official Response: 'Where Is the Mingazprom Going So Fast?'" ; first paragraph is EKO introduction]

[Text] "Where Is the Mingazprom Going So Fast?" Such was the title of an article by Candidate of Economic Sciences V. A. Kryukov, Doctor of Technical Sciences Yu. I. Maksimov, and Doctor of Economic Sciences B. P. Orlov, published in EKO, No 7, 1988. They criticized the USSR Ministry of the Gas Industry for a narrow orientation on gas extraction, and proposed making wider use of cycling process technology, which is far from new, having been used in the USA and Canada since the late 1930s. It provides a possibility for extracting the by-products of gas extraction more fully.

[Vyakhirev]: Scientific and production collectives of the USSR Mingazprom [Ministry of the Gas Industry] are aware of the problems touched upon in the article. These problems were stated correctly from the standpoint of general state interests.

The USSR Mingazprom plans to put new facilities into operation in 1989-1990 at the Kotelevskoye and Timofeyevskoye deposits, where the cycling process will be introduced. An installation having no analogues in the world will be introduced at the unique Karachaganakskoye oil and gas-condensate deposit in 1990. It will permit extraction of an additional 100 million tons of condensate. The cycling process is to be employed more extensively in the next five-year plan at the Yen-Yakhinskoye, Kokdumalakskoye and Yablunovskoye deposits.

It should be noted that introduction of the cycling process is being delayed by gas condensate pricing policy. These prices are significantly below world prices, and they do not account for the additional outlays on employing progressive procedures. This is why even partial use of the cycling process is unprofitable, and according to an estimate by the Yuzhniipigiprogaz Institute, the loss suffered at the above-mentioned unique Karachaganakskoye deposit is 119 million rubles per year.

In addition the USSR does not produce the compressors, the pressure and regulating fittings and other oil field equipment necessary for introduction of the new procedures, while that which is produced, for example by enterprises of the USSR Ministry of Chemical and Petroleum Machine Building, is delivered late.

There is more to the effort to get more condensate from extracted gas than the cycling process. Thus oil and low temperature absorption procedures are being introduced at some deposits. Other components are extracted as well—ethane, propane, sulfur and helium.

The USSR Mingazprom submitted a proposal to the government for designing and building gas and chemical complexes (Urengoy, Astrakhan, Shurganskiy, Sosnogorsk, Turkmen). Components obtained during gas extraction at these complexes will be processed into commercial products.

### Gas Industry Ministry Equipment Scandal Exposed

18220104 RABOCHAYA GAZETA in Russian  
15 Feb 89 p 2

[Article by V. Slizkoukh: "Rejects in Import Packaging"]

[Text] The directors of the USSR Ministry of the Gas Industry are displeased with RABOCHAYA GAZETA. That is because it rummages around, they think, in problems that are not included in its competence. For example, last year, without asking their permission it took and published the material "Chudo zamorskoye" [An Overseas Miracle]. This was about the USSR Ministry of Foreign Trade and the Ministry of the Gas Industry purchasing overseas an automated control system for the Urengoy-Uzhgorod gas pipeline. They laid out hundreds of millions in foreign rubles for it, and the quality of the system, to put it mildly, was dubious. It was planned that as early as the second six months of 1985 the ASU would be fully turned over for operation and would begin to yield a perceptible economic effect, but because of very poor workmanship and numerous defects through the fault of the manufacturer—the French firm, *Tompson-TsSF*—the system was put into operation only by 1988.

How should an assiduous manager behave in this situation? He should impose fines on the partner, require him to correct the situation and refuse, finally, his "services." The Ministry of the Gas Industry, however, chose a different tactic: in conjunction with the directors of the *Soyuzgazavtomatika* All-Union Scientific-Production Association, which also actively participated in concluding the defective contract, it began to put intensive pressure on the subdepartmental enterprises to agree to take the inoperative ASU on their balance sheet.

That is when RABOCHAYA GAZETA brought this story to light, so that the readers should know how irresponsibly state funds are used at times. The main task of the publication, however, was to draw the attention of

official organs to the problem and to aid in its rapid solution. The ministry, however, took the publication as a breach in authority and even more—as an attempt by the paper to break up their foreign economic collaboration.

True, in the official response, signed very unwillingly by A.D. Sedykh, acting chief of the scientific-technical administration, it was still noted that the "critical comments on the whole correctly reflect the poor workmanship." A whole package of assurances was issued, of this type: "The periods of time for putting the system into operation were agreed on with the firm for individual regions, including those for *Ukrgezprom*—April (we have in mind, of last year.—Ed.). As a result of the indicated organization of work, the plans and software taken from the firm carried out all the specified technical requirements for the functions of the gas pipeline control."

A few months later, when it appeared that the assurances issued by A.D. Sedykh did not correspond even approximately to reality, a repeat report was issued—on the fact that not only at the *Ukrgezprom* section but also at *Tyumentransgaz*, *Eksporttransgaz* and *Prikarpatransgaz* and a number of other associations, work on putting the ASU into operation had bogged down on the site, that the firm, as before, was not fulfilling its obligations, and that the Ministry of the Gas Industry was not taking the proper measures. After this, RABOCHAYA GAZETA in general fell into the disfavor of the directing comrades. They simply did not answer the publication. The editors' reminders were also answered with a threatening silence. Do not meddle, they said, work!

For ten months we "did not meddle," we waited for a change for the better. But alas, the system has still not been put into operation! New schedules are being compiled, the deadlines are being postponed, and the results are not comforting. Perhaps, at least after this, the comrades from the Ministry of the Gas Industry could be convinced that it is not the newspaper publications that are to blame for this, but something else. The USSR Committee for People's Control, which last June verified how the currency funds would be expended by the ministry and the equipment purchased abroad would be used, including the ASU for the gas pipeline, names two precise reasons for the unsatisfactory work: mismanagement and extravagance.

We will cite certain conclusions of the KNK [Committee of People's Control]:

"In the course of checking, it was established that at the end of 1987 representatives of the ministry received from the firm software that did not correspond to the technical requirements of the contract. Right now the control system and connections installed earlier are being rebuilt. For these purposes, various equipment worth almost 8 million foreign currency rubles was

additionally purchased from the firm. In addition, the firm failed to supply 1.6 million rubles worth of equipment for the communications system."

We will now compare this with what A.D. Sedykh wrote in his reply to the editors. Do you sense the difference? It turns out that the acting chief of the ministry's main scientific-technical administration did not simply give out unsubstantiated assurances, but also led both the editors and the readers astray. How is this insincerity explained: by a sense of all-permittedness or a desire at all costs not to soil the departmental uniform? Both, however, are equally immoral.

We will return, however, to the KNK document:

"In the opinion of specialists of USSR Gosplan and the Ministry, the control system for the Urengoy-Uzhgorod gas pipeline will begin to operate in full volume in 1991-1992, on the basis of obsolete technical devices worked out in the 1970's. Under actual conditions it does not ensure fulfillment of the planned requirements.

"In particular, at the Tyumentransgaz, Volgotransgaz, Mostransgaz and Ukgazprom associations, instead of the specified plan for reducing the number of service personnel, the introduction of the ASU requires an additional staff increase (without counting repair services) of at least 200 persons. The operating expenditures will increase sharply....

"However, the ministry has not imposed any claims upon the firm or forfeit for untimely and poor-quality execution of the contract. Moreover, the firm was paid an additional 8.4 million foreign currency rubles to extend the periods of the guarantee for the equipment supplied and fulfillment of essentially worthless work on introducing software programs prepared with poor quality."

The commentaries here, as the saying goes, are absolutely useless. We will add only that, N.I. Ryzhkov, chairman of the USSR Council of Ministers, was familiar with the conclusions of the KNK. The resolution followed: "I ask that there be an objective investigation, that the guilty partners be punished and that measures be taken to prevent such cases being permitted."

It would seem that everything was clear, and that matters would now liven up. V.S. Chernomyrdin, the USSR minister of the Gas Industry, however, immediately softened the strict formulation, by writing on the document the instructions to his deputies: "I ask that you look carefully into the questions of purchasing equipment abroad, constructing objects with the use of imported equipment and putting it into operation. Prepare the proposals." As we can see, there is no longer any question of punishing the guilty parties, as if there were none of them at all.

This is also a type of tactical maneuver—the comrades from the Ministry of the Gas Industry are trying to lay all the sins for choosing an unsound supplier on the USSR Ministry of Foreign Trade. We listen, as A.V. Miroshnichenko, chief of the division for planning the control systems of the Donetsk YuzNIIgiprogaz Institute, explains his participation in the negotiations:

"It seems that in the beginning of 1981, a group of technicians, in which I found myself, was drawn in by the Ministry of Foreign Trade to carry on negotiations with the representatives of a number of firms in Italy, the FRG, Yugoslavia and France on the subject of purchasing in one of them ASU systems for a future gas pipeline. In a word, to select a reliable partner from them. If I had made the decision, I would have collaborated with the Italians. We were persistently advised, however, to work with Gaz de France, also a solid firm. We were prepared to sign the technical part of the contract over to them. Negotiations with the firm, however, reached a deadlock, the document was not signed and they sent us home. Except that a telegram came to Donetsk: 'Go to Moscow immediately.' There, it was said that in the course of a week we must prepare to sign a contract with the Tompson-TsSF firm. Many of us had not even heard of it. Indeed, though, what did we have time to do in a week? We confined ourselves to changing the name of the firm in the document prepared earlier. When we went to the negotiations, the representatives of the Ministry of Foreign Trade gave advance warning that we should not even open our mouths there. So we sat in silence, until the contract was signed."

We cannot trust that everything happened precisely this way—the objectivity of what was said is on A.V. Miroshnichenko's conscience. We imagine that everything was that way, however. After this, would you have more respect for the person who dared not open his mouth at the negotiations and, without thinking about it, placed his signature on a contract with a firm about which he had never until then had the least knowledge? Can this, to put it delicately, complaisance be explained merely by the fact that the purchase of the system was conducted through gratuitous state funds? We are not sure.

One thing can be stated firmly: not only A.V. Miroshnichenko, but other technicians as well, are minimizing their role. After all, their principal position could have been to change drastically the fate of the contract, especially, the choice of the suppliers. M.M. Mayorov, general director of Soyuzgazavtomatika, so to speak, one of the main "technicians," with his own hand signed the technical-economic conclusions on the choice of the supplying firm, in which it was said precisely: "...It is expedient to take the purchase of the gas pipeline control system to France, and that the general supplier of the system will be the Tompson-TsSF firm. The periods for supplying the system, proposed by the firm, permit the Ministry of the Gas Industry to put the system into operation in the instructed periods...." Or was the general director also misled? Just who, then, was this criminal?

Now about the results. Just recently M.M. Mayorov informed the editors that the Elektronorgtekhnika Foreign Trade Association had fined the firm in the amount of over 88 million French francs for violating the periods for turning over the system. As an additional measure of action, the Thompson-TsSF firm had also been forced to pay the sum of 1.7 million rubles for work on technical assistance. These measures, it must be assumed, force the suppliers to fulfill their contractual obligations more carefully. It remains only to regret that this was not done three years ago. Then we would probably have different results today.

The Ministry of the Gas Industry is also making desperate attempts to launch the ASU on the section of at least one association. These efforts, alas, are yielding little, even though in the spirit of the old traditions, the comrades are also trying to pass off what is desired for reality. For example, the general director of Soyuzgazavtomatika recently assured the editors that a statement had already been signed on putting the system into operation at the Mostransgaz facilities. It actually turned out, however, that this consisted of a paper launching of the ASU, not a real one.

In addition to all the other shortcomings of the system, last year another one was discovered: it is completely unsafe to operate. Without going into details, we will say: at one of the crane areas of the Kharkovtransgaz Association, the line equipment burned up. Fortunately, there were no people near, and no one suffered. A commission was immediately set up by the Ministry of the Gas Industry, which for some reason did not appear to include an electrical specialist, and it came to the conclusion that the reason for the destruction was a thunderbolt. At the same time, no deviations were revealed from the plan in carrying out the grounding and organizing the electric power supply, in the words of our well-known M.M. Mayorov.

This last assertion, in our opinion, is clearly illogical. If a system and its means of protection are truly reliable, a thunderbolt should not destroy the apparatus. If this did happen, however, who was to blame? There is no intelligible answer to this question in the conclusions of the commission—everything is put down to a random force, a heavenly one. There is nothing to expect from it, as they say.

The electrical specialist, if he had been present at the analysis of the causes of the accident, certainly would have found a different explanation. Therefore, N.G. Portyanko, the former director of the YuzhNIIGiprogaz Institute, insisted on sending a telegram to R.I. Vyakhirev, first deputy minister: "We urgently request that the statement of the materials of the commission be held back. Its lack of an electrical specialist led to incorrect conclusions, the problem is related to the electrical safety of the equipment of the Thompson system. I ask that you give instructions for a repeat visit of the commission..."

They did not give them! Instead, they sent a threatening telegram to the institute—"immediately work out planning designs to protect line apparatus from thunder."

Excuse me, on what basis is this to be worked out, is it to be made up? Another telegram flew to Moscow: "It seems impossible to fulfill your instructions, because of the fact that the conclusions of the commission are incorrect, of which you have already been informed. In consideration of the seriousness of this question, I request that it be re-examined." In reply—again: "We ask to be informed of the decisions made concerning the thunder protection...." This telegram duel continues, and the problem, meanwhile, is not being solved, even though it becomes more critical with each day. I should not like, as they say, to put the evil eye on anything, but where is the guarantee that the thunderbolt or whatever will not destroy another object there tomorrow, with even more serious consequences?

Such guarantees are necessary. Both in particular and in general. As the ASU finally begins to operate efficiently and productively, will it not be an expensive burden for the production collectives? The Ministry of the Gas Industry itself, to all appearances, cannot or does not want to evaluate objectively the system's potentials. Therefore, it is extremely necessary for it to help the interdepartmental, disinterested commission—the quicker the better. After all, time is money, and we have lost (just like money), more than enough of it.

## ELECTRIC POWER GENERATION

### Outmoded Power Ministry Thinking Impedes Technological Progress

18220043 Moscow SOTSIALISTICHESKAYA  
INDUSTRIYA in Russian 19 Feb 89 p 2

[Article by A. Ryzhakov, candidate of technical sciences (Moscow): "In Pursuit of Progress"]

[Text] The USSR Ministry of Power and Electrification is not fulfilling its plans for the startup of new capacities not only under the current five-year plan, about which concern was expressed at one of the meetings of the permanent commission on energy of the USSR Supreme Soviet, but for at least the last three five-year plans in a row. And not by 3-5 percent, like other branches, but by 30-40 percent, which is apparently allowed only for this ministry.

Here it must be taken into account that the plan for the startup of capacities under the 12th Five-Year Plan, strictly speaking, was drawn up in a merciful variant: 11-13 million kilowatts a year. Incidentally, the energy engineers provided for these rates even about 20 years ago.

In those days electric power stations were shooting up like mushrooms after a rain, and the unit capacities steadily increased in stages—100, 200, 300, and then 500



megawatts. Flowline construction methods we held in esteem. They were used not at individual construction projects but at almost all the large GRES's that were under construction. Incidentally, these methods were not only borrowed in the United States, but were advanced a great deal in implementing the "Independence" program (1980-1990).

The American program pursues the goal of escaping its dependence on Arab oil through the introduction of 200 energy blocks of 500-600 megawatts using coal from eastern deposits. Unified plans were drawn up from 70 large components which are suitable for putting together in various combinations. As a result there was a decrease in time expenditures on planning as such since all they had to do was assemble the components and figure out how to join them. The United States now introduces 20-25 of these blocks a year.

The USSR Ministry of Power and Electrification, Teploelektroproyekt, the All-Union Heat Engineering Institute imeni Dzerzhinskiy, and the Power Engineering Institute know about this experience from publications. But nobody is standing in line...

We have become accustomed to thinking that coal means pollution of the environment, black snow in winter, and pastures covered with ash—in general, power engineering of the past. But this is not the case today. In the FRG and Japan there are already coal burning TES's in operation that are ecologically pure both in terms of cleanliness and in terms of the composition of discharges into the atmosphere. But domestic coal burning stations frequently do indeed look like remnants from the past, the long era of stagnation has had such a destructive effect on them.

What is holding us up? The development of 800 megawatt coal blocks for the KATEK GRES showed that we have entered a blind alley. These blocks are such gigantic structures that it is as though they really were intended for our destruction. And, frankly, they really are capable of bringing the national economy to its knees. And it took a uniquely long time to construct the first GRES—more than 10 years from the first peg until the startup of the first block.

But the absorption with quantity that is inherent in our cost economy is not the main factor; the main thing is that the TES technical equipment of the majority of developed countries is undergoing a change of generations, the technological principles for the combustion of coals and the purification of discharges from electric power stations are changing. Consequently, there are also changes in the design, profile, and equipment for the plants that manufacture the boilers. But before a design is changed it must be worked out on experimental models, and here is where our engineers have been and still are helpless. Of course, organizational measures

have been taken in the branch, detailed planning assignments have been given, and developmental programs have been drawn up in order to rapidly assimilate that which in other countries has already become...commonplace.

And a familiar question arises right here: why catch up if we are already well aware of the pluses and minuses of Western achievements and without catching up (that is, without repeating the rapidly aging variants), we can immediately go to the most progressive ones, including domestic? For if we want to achieve success in the competitive struggle with Western firms, we must either join forces with them (enter into association with them, even if it is under disadvantageous conditions) or become trail blazers in the development of the energy branch. Finally, we must learn to select the most advanced technical systems, improve them, and put new equipment on the market.

Unskilled organization of all of our work, threadbare outdated methods of cooperation among branches and enterprises, and the inability to develop *khozraschet* and look out for our own interests all insure failure of the matter. Added on to this is the subjective factor—as before, administrative-command methods of control of scientific and technical progress are in effect in the branch, so that the opinions of specialists, if they are taken into account at all, can only heighten individual ambitions. And the leaders of the scientific research institutes obediently approve the decisions of the ministry officials.

How is this reflected? In the fact, for example, that the USSR Ministry of Power and Electrification has paid practically no attention to its scientific research institutes concerning the more rapid developments, that is, the ones that will enable them to become leaders. Why be leaders? Everyone knows that we have very efficient developments. Even though this is well known, for some reason it is thought that they do things better over "there" and we always get an inferiority complex: even though we can do the job, we cannot overcome it. It is beyond our capacities, as they say. But who thinks that? Again the officials!

Although, of course, they know that in the past two decades it has been practically impossible to develop and perfect principally new equipment since everything has been suppressed either by barrack-like shouts or refined administrative maneuvering.

In branch science command management methods completely emasculate the most useful areas, the ones that are most important in a practical sense. If the ministry's main board in charge of questions of the introduction of new equipment in the branch operates within the traditions of the administrative-command system, the shoots of principally new ideas can force their way through the web of its instructions only at the expense of innocent research that from the very beginning makes no claim to

any future. The stamp of failure is placed on new solutions to technical problems even when they are in the stage of the first suggestions, and their further development takes place under the conditions of a hostile atmosphere from both above and below. The system does not allow anybody to be more intelligent than it is, and it appropriates the rights of both the leadership and the specialists.

In the problem of control of scientific and technical progress it is necessary to bring into the foreground the question of the rights of the specialists, whose opinions interest few people today. And it should be quite the opposite. Moreover, specialists should be able to count on fair compensation for their labor. In brief, we need *khozraschet* relations between the developers of new equipment and the client enterprises which eliminate administrative maneuvering, that is, relations that are something like rental relations.

But what is the rental object here? Of course, the capital of the scientific research institutes should not be the basis for such a system, since it means nothing in and of itself. The only things that are meaningful are new ideas and their embodiment: new technical systems, technologies, production plans, programs, including programs for modeling processes, and engineering calculations. Even though this is an intellectual area, under the conditions of the kind of socialism we want to have, it is a quite real value which is perhaps equal to that of means of production, and possibly it is more important.

The times are changing. It is time to take off on an independent flight. The necessary conditions have been created for this: the rights of specialists to their own kind of maneuvering have been confirmed in party documents and decisions of the 19th Party Conference. But it seems that one thing is lacking: to develop technical restructuring, of course, without catching up with the leading countries, but proceeding on our own path. We cannot? Can we ever!

Here is an example. In 1987 at the Alma-Ata GRES they introduced a boiler with a principally new technology for burning coal and it has been in operation for more than a year now. And this technology makes it possible to speak of a technological leap forward that goes beyond our partners in terms of many, many parameters. First and foremost it makes it possible to modernize the fleet of existing boilers while in the West so far they are producing only new installations that are unsuitable for replacing or modernizing old equipment. Moreover, this technology successfully solves the problem of a radical reduction of harmful discharges. In brief, this system is also suitable for developing the construction and modernization of TES's by the flowline method on the basis of standardized plans. And we need this desperately.

But the USSR Ministry of Power and Electrification, as usual, is in no hurry to develop the Alma-Ata technology. On the contrary, they are again relying on Western

technologies, leaving their own without financing, without the support of design forces, and with nothing but enthusiasm they will inevitably suffocate. But they will probably be born again in some Western firm, and then we shall again be catching up, catching up... There are as many examples of this as you could want. But for how long?

### **Comprehensive Electric Power Program Needed in Georgia**

18220077 Tbilisi ZARYA VOSTOKA in Russian  
3 Feb 89 p 2

[Article by Konstantin Betaneli, deputy chairman on Scientific Work of the Commission on the Study of Productive Forces and Natural Resources of the Georgian Academy of Sciences, corresponding member of the Georgian SSR Academy of Sciences, and Vakhtang Kakabadze, deputy chief of the Study and Use of Power Resources, candidate in Technical Sciences, senior lecturer: "A Purposeful Program Is Needed"]

[Text] Our republic has at its disposal considerable hydraulic energy resources, limited supplies of coal and quite small petroleum resources. In recent decades (1965-1985), certain quantitative and qualitative changes have taken place in the development of the republic's TEK [fuel-energy complex]. The production of electrical power increased by a factor of 2.4, and of thermal power—by a factor of over 3.5. The power available per worker increased. During the period from 1958-1987, however, coal extraction in the republic decreased by 43 percent, and of petroleum in the period from 1984-1988—by over 90 percent.

The 12th Five-Year Plan maintained the negative trend that had formed in the last five-year period, of outstripping growth in the volumes of the accumulated public product as compared with the production of electric power. This intensifies the effect that the relative lagging behind in the electric energy base has on the republic's economy. This situation is mainly caused by the slow development of the basic capacities. In the last few years the electric power of the Georgian SSR has been developing mainly through the use of hydroresources. In the autumn-winter period the republic experiences an acute power shortage, as the result of which the need constantly arises to restrict consumption. Therefore, as is shown in the plan, to create a reliable electric power base for the republic, there must be a boost in expanding and renovating the Tbilisi GRES and accelerating the construction start of the basic electric power plants—the Kutaisi GRES and the new Tbilisi TETs.

An analysis of the data worked out by the planning organs and certain planning and research institutes in the republic on the long-term development of local energy resources reveals the extremely low level of their use in the long-term fuel-energy balance (TEB) of the Georgian SSR. In the long-term period, the main portion in the structure of the local fuel-energy resources (TER)

goes to hydraulic resources and coal, the total portion of which in the overall balance of TER consumption fluctuates in the region of 19 percent. It should be noted that a further portion of the hydroresources used constitutes about 10 percent of their total potential reserves, or about 18 percent of their technical reserves. It is obvious that these scales of development of the hydroresources should be expanded. For this, however, large capital investments are required, necessary for GES construction. If the appropriate measures are not carried out, in the future the proportion of hydroresources in the overall TER balance will gradually be reduced. Eliminating the shortage of electric energy production will also contribute to accelerating the regeneration and construction of small hydroelectric power plants (MGES).

According to the data of the planning organizations, the yearly consumption of mazut in the future will be steadily reduced from 2.9 to 1.7 million tons. It should be noted, however, that introducing deep processing technology for petroleum will reduce the output of mazut by a factor of over 3.5. It will therefore be quite difficult to bring fuel mazut into the republic. Under these conditions the use of mazut will be limited to that of a peak and reserve fuel for thermal power stations, in systems of centralized heat supply and industrial boiler houses. The portion of natural gas in the fuel balance of the Georgian SSR in the future will be respectively 80 and 86 percent. The possibility is not ruled out, however, of restricting the increased transfer of natural gas to the republic. In this case, the shortage of natural gas will be roughly 5.6 million tons of conventional fuel in a year, which is equivalent to 8.6 million tons of run-of-mine coal. It is impossible to cover such a sizable fuel shortage only through local coals, because of the limited nature of the republic's coal reserves.

An analysis of the dynamics of the growth of solar, wind and geothermal energy use in the general TER consumption reveals quite negligible volumes and rates for their long-term development. Therefore, it should be considered extremely necessary to increase considerably the use of these non-traditional regenerated types of power resources in shops producing thermal and electrical energy. It must be noted that our republic's national economy is characterized by the intensive development of agriculture and the food and light industry. The Rustavi Metallurgical Plant, Rustavi Chemical Combine, Zestafoni Ferrosmelting Plant, the Caspian Cement Plant, etc., are major energy-intensive production facilities. Based on what has been said, it should be considered that the development of the republic's national economy should not be oriented toward the construction of large energy-intensive production facilities. In many sectors the structure of the industry is oriented toward decentralized supply of thermal energy. Because of this, the utmost development of local non-traditional regenerated energy resources can considerably increase the proportion of using local energy resources in the republic's TEB. The largest relative proportion of non-traditional energy resources can be in

the rural and municipal economies, in the recreation system and in the food and light industries. As we know, at present the production of thermal solar collectors (SK) in the republic is not over 20,000 square meters a year, while their yearly production is, for example, in Egypt—110,000 square meters, in Italy—120,000, in Japan—1 million and in the United States—1.6 million square meters.

Along with the efficient and comprehensive use of energy resources, one of the effective ways to conserve TER is utmost and widescale development of energy-conserving technology.

The specific consumption of coal, for example, at the Tkvarcheli GRES is almost twice as high as the average all-union indicator. This indicator is even higher at the Rustavi TETs and the TETs of the Kutaissi Motor Vehicle Plant, burning brick and lime, as well for municipal-everyday consumption. Direct losses of coal in 1985 due to its inefficient burning exceeded 800,000 tons of run-of-mine coal, and the losses amounted to 30 million rubles. According to incomplete preliminary data (Gruz-NIIEGS [Georgian Scientific Research Institute of Power Engineering and Hydrotechnical Structures], NIIEPU [Scientific Research Institute of Economics and Planning] and the State Committee on Fuel), the total losses from inefficient use of fuel-energy resources and electric and thermal power in the Georgian SSR national economy on the whole for the year exceed an amount in the order of 160-180 million rubles. The recovery and heat-exchange units used are characterized by extremely low efficiency, and at most of the facilities they are not used at all. Today, in many countries of the world at massive numbers of production facilities, equipment is also used to recover low-temperature secondary energy resources. These are recuperators of the heat from exhaust air in buildings and structures and heat pumps.

In contrast to recuperators, calculated for limited use, heat pumps can be found in use everywhere where the required temperature does not exceed 60-80 degrees. Therefore, the potentials for their use are tremendous. Depending on the type of equipment replaced, heat pumps save from 20-70 percent of the primary energy, which makes it possible to conserve millions of tons of fuel. In addition, they do not pollute the air, and their use reduces the number of service personnel.

The effectiveness of introducing energy-conserving equipment at any enterprise is determined by the capital investments in equipment and the value of the resources saved, which is usually estimated by means of the rates in force at the enterprise. These indicators not only fail to reflect the full national economic effect, but also contribute to underevaluating the very essence of the energy conservation policy, by restricting it to narrowly departmental interests.

Also delaying the introduction of energy-conserving equipment at enterprises is the fact that the effect from it will be obtained in the future, and the material and work resources that need to be introduced should be drawn in today. There are two possible ways to solve this contradiction: economically—purposeful allotting from the general sums funds intended only for the purpose of energy conservation, and organizationally—development and implementation of target programs for specific types of energy-conserving equipment.

As before, the energy losses during transport and with uneconomical consumption conditions are considerable. Implementation of measures for TER and energy consumption economy by 25-35 percent by the year 2000 can ensure the republic a fuel resource saving amounting to 7-10 million tons of conventional fuel a year.

Therefore, the utmost development of utilizing local non-traditional regenerated energy resources, combined with an energy-conserving policy, can considerably increase the proportion of their use in the republic's TEB.

Even without that, the difficult situation in the power engineering of the Transcaucasus has become even more tense because of the solution adopted by the union organs on the work situation at the Armyanskaya AES. Therefore, maximum use should be made of the available energy potential.

On the basis of the above, it should be considered necessary to develop long-term, purposeful programs based on advanced achievements in world practice, maximally possible use of local regenerated energy resources of the Georgian SSR, energy conservation and the development of work to improve the republic's fuel reserves.

#### **Tbilisi Gets Hydroelectric Power Station**

18220079a Tbilisi ZARYA VOSTOKA in Russian  
8 Feb 89 p 2

[Article by Valeriy Budumyan: "The Tbilisi GRES Expands Its Boundaries"]

[Text] Construction. As a rule, for each of us this work is above all associated with a long board fence surrounding the construction area, with a rumbling compressor, mounds of cement, sand, brick....

What is now taking place on the territory of the Tbilisi State Regional Electric Power Plant (TbilGRES), however, goes beyond the bounds of the traditional concept of a construction project. It encompasses hundreds of square meters of area, where construction of the plant's ninth power unit is in full swing.

An endless file of large-load KamAZes brings building materials here. Powerful excavators, "getting their teeth" into the earth, turn over tons of soil, laying the trenches for the underground communication lines. From time to time a tall crane is called upon to lift heavy metal structures....

"The ninth unit is slated to be put into operation in the fourth quarter of this year," says Zurab Mindeli, director of the TbilGRES. "At the same time, this is the first of the four new underway complexes of 300 megawatts each, called upon in the near future to raise our plant's productivity noticeably. After all, TbilGRES was and remains practically the only basic electric power station in Georgia, and in the autumn-winter period it produces over 60 percent of the republic's electric power. Through its expansion, renovation and refitting with modern power equipment, it will be able to produce 80 percent. The renovation periods are minimal. While the ninth unit is to go into operation this year, the twelfth is slated for 1993. After all, the tenth and eleventh power units will be built in between."

Such compressed periods, with such a colossal amount of work—is a necessary measure. It is based on the resolution of the USSR Council of Ministers for an extremely rapid increase in the energy potentials of the Transcaucasus republics, related to the shut-down of the Armyanskaya AES.

Hence, the ninth power unit of TbilGRES. Its construction, in accordance with the plan of the Rostov Division of the Teploelektroproyekt Institute, is being carried out by the TbilGRES construction administration for the Gruzgidroenergostroy Construction-Installation Association. What is the new underway project like now and how will it be at the end of the year?

Let us go to the construction site. On the left is the foundation and partially built frame of the main wing. Stipulated here is the installation of the main power equipment, the turbo-unit and the steam generator. On the right is the smoke stack. So far it has been built to a height level of 102.5 meters. Its construction is being done by the Tbilisi section of the Moscow Energovysotspetsstroy Mobile-Construction Administration, the chief of which is Zaza Sikharulidze. A word with him:

"The maximum height of the stack will be 270 meters. We will complete the construction of its reinforced concrete shell in July and will pass the baton to the specialists of the Gidromontazh Trust of the All-Union Gidroenergostroy Construction Association, which by November will complete the installation of the inner metal shaft of the pipe, 9.7 meters in diameter. Right now 30 steeple jacks are working on its construction. Just as many are working on constructing the cooling tower—the facility for the recycling of the water supply. The cooling tower will be 120 meters high. This is truly a unique structure. Why? In the first place, because it will be monolithic. In the second place, its capacity will be



triple that of the one presently in operation at the plant. Finally, in the third place, a cooling tower of this type is the second one in the Soviet Union. The first one was constructed at the Zaporozhe AES."

You could watch the work of the steeplejacks for hours. The precision, coordination of actions.... Unfortunately, this tells you nothing of the work of the suppliers, who provide the construction project with the necessary materials and equipment. True, recently the situation has somewhat stabilized, but still.... This is what Anzor Abzianidze, chief of the Division of Capital Construction for the TbilGRES had to say:

"At first the Volga Metal Structures Plant really put us in a bad spot. It manufactured and shipped us only 500 tons of metal structures, instead of the 1,824 tons needed. Moreover, it was impossible to install them on time because of the incompleteness of the delivery. Now, it is true, things are easier: due to the assistance of the USSR Ministry of Power and Electrification, we have already been shipped 1600 tons. In order to repair the omission, however, the construction workers have to work 24 hours a day. This is all very well. The situation is worse with the high pressure pipes, supplied by the Belgorod Boiler-Machine Plant. There are almost none of them. 'The wheels are spinning' and the approach tracks are being laid. Because of the lack of the necessary number of cross ties and rails, which we expect from the Transcaucasus Railroad Administration, the construction of the approach tracks from the construction base to the main wing of the ninth power unit is being delayed."

It would be nice to believe, of course that all these problems will have a favorable solution in the near future. Everyone, including our suppliers, know very well that putting this unit and the remaining three into operation in the slated periods is a task of paramount importance. After all, in the final analysis, no one can do without electric power today!

**New Geothermal Heating Idea Explored**  
18220079b Moscow IZVESTIYA in Russian  
13 Mar 89 p 1

[Article by E. Poret: "The House of the 21st Century"]

[Text] Specialists of the Scientific Research Institute of Construction Physics of USSR Gosstroy were the first in our country to create a unique system for a non-traditional method of heating housing facilities.

Scientists have found a method of using the heat from the upper layers of the earth to heat rural-settlement-type houses. The inventors' tests have shown that this system is very economical and convenient. In the near future it will be widely used in the construction of rural settlements. Moreover, it requires no expenditures for construction of central or furnace heating. Houses equipped with this system are ecologically pure.

Widescale introduction of the method of heating and hot water supply through the thermal energy of the earth considerably reduces the number of thermal electric power plants, which do a great deal of ecological damage to the environment, and the energy saving is 50-70 percent.

The new method is very simple. Polyethylene pipes located two meters deep, with a water solution of anti-freeze, collect the ground heat and transfer it to a freon chamber. There, by means of a compressor, the original low temperature (4-6 degrees) is converted into normal room temperature. The mercury column of the thermometer can rise to 40 degrees. In summer there is always cool, clean fresh air in the facilities. Setting and changing the temperature is automatically controlled.

"The use of the new system," Sergey Nikolayevich Kholuyev, senior foreman of the combined pavilions of the USSR VDNKh (where an experimental model of this house is being exhibited), "is particularly convenient for houses of the dacha type in a rural area. True, there could be difficulties due to interruptions in the electric power, which is the only source of functioning for the heat-pump system. The problem can be solved, however, through installing wind-air storage tanks and using solar energy. There is no doubt that there is a future for these houses."

**Lack of Investment in Wind Electric Power Generation Hit**

18220067a Moscow PRAVDA in Russian 28 Feb 89 p 6

[Article by A. Urantsev: "Wind in the Harness—Alongside the Researcher"]

[Text] Several dozen kilometers from the Arctic Ocean, the lights go out in the huts of the hunting and fishing sections of the Yakutsk Nizhnekolymskiy Sovkhoz, lost among the blinding whiteness of the snow. The severe cold steals into the living quarters of the hunters and fishermen.

Specialists from the Vetroen NPO [Scientific Production Association] flew immediately from Cherskiy by helicopter to tune it up. Several hours later the masters of the winter huts flipped a switch, and the strong northern winds once more brought warmth and light...

Billions of kilowatts of cheap electric power could be generated with the aid of the wind. Today the inventory of operative wind-power installations in the world exceeds three million. There are 15,000 of them, for example, in the American state of California alone. We have just 3,500 windmills. And how many of them are "whirling," few people know. Even Goskomstat [State Committee for Statistics]...

Just why is a cheap and ecologically clean source of electric power in disgrace? I went to the Moscow suburb of Reutov seeking an explanation. Here is where the Vetroen Scientific Production Association of USSR Minvudkhov [Ministry of Land Reclamation and Water Resources] is located.

The delicate towers are visible from afar. The blades are whirling rhythmically high above the ground.

The size of the blades is six meters, and the power of the unit is four kilowatts. Looking at it, I am reminded of a long-ago trip to the polar station on Vaygach Island. A wind motor that had been installed on the island back in 1940 was shown to me as one of the local sights. So many generations of polar workers have come and gone over the decades since, while the wind installation has continued to provide people with heat and light. But there are not so many of these wondrous machines in the transpolar regions.

"We use the gifts of nature in very stingy fashion in our country," confirmed I. Sidanov, the deputy general director for science of Vetroen. "Even though wind capacity exceeds all of our reserves of organic fuels and hydroelectric power resources taken together. Some 20 percent of the need for electricity in the country could be provided from this non-traditional power source."

One can see much that is interesting at the association's design bureau. Increasing the area of wind capture could put hurricanes to work for man...

So far they have assimilated the output of units of up to 30 kW [kilowatts] capacity at the plants of the NPO. They are economical and suitable for exploitation in any region of the country. The most promising are considered to be the 100-kW units, and their series output will begin in this five-year plan.

Nonetheless... Could windmills be designed with contemporary million-watt turbogenerators? It turns out that they can.

Here is a map composed at Goskomgidromet [State Committee for Hydrometeorology]. It signifies the regions where strong winds prevail constantly. There are many such regions: the Baltic area, the northern Caucasus, the shorelines of the northern Arctic Ocean, Kazakhstan... It has been calculated that wind installations on the Kola Peninsula alone could generate 200 million kWh [kilowatt-hours] of electricity.

Today the Vetroen NPO answers entirely for the design, incorporation and operation of autonomous wind electric-power plants. It would seem that today, when the entire material and technical base has been concentrated in one set of hands, it would be easier to harness the free wind. But departmental "fences" have appeared here.

"Many ministries are looking at us just like Don Quixote," asserts I. Sidanov heatedly. "Two years ago a decree was adopted to accelerate the development of wind power. Everything was spelled out in it—who is responsible for what. USSR Minelektrotekhprom [Ministry of the Electrical Equipment Industry] is obliged to provide our plants with constituent items. But the sector has not fulfilled a single one of the government's targets as yet. For instance, last year the ministry was supposed to supply us with 1,600 generators, and the association's plants were sent just 402 units in all."

On the desk of I. Sidanov are telegrams from the plants of the association, each more alarming than the next. The labor collectives of the enterprises are demanding that harsh steps be taken toward the suppliers. I will name the chief "offender": the Frunze Tyazhelektromash [Heavy Electrical Equipment] Plant imeni 60th Anniversary of the Kirghiz SSR. The plant's people cite no few reasons as justification: there is a shortage of castings, a lack of funds, low profits from the sale of mini-generators.

I will add a little commentary to the last reason. The Danish firm of Altenergia, which is engaged in the production of parts for the wind-powered generators, has increased its sales turnover from 200,000 dollars to 20 million over four years... Today the company offers a rich assortment of small wind electrical machinery in various models. While at Minelektrotekhprom they have meanwhile been able to practice composing clever replies...

"The issue today is that capital investment in wind power today should be the same as for the construction of a nuclear or hydroelectric power plant," says R. Sarukhanyan, the deputy general director of the NPO for the incorporation of new technology, with conviction.

Reproaches are often directed at Vetroen: the units manufactured at their plants are far from perfection. That is correct. Funds and modern machine tools and technology are needed in order to straighten them out. Where to get them? Some 13.9 million rubles have been allotted for scientific-research work on wind power in the state program for the utilization of non-traditional types of energy in the fuel-and-power equation of the country. The NPO has received just 800,000 from GKNT [State Committee for Science and Technology]. Can we really talk about any serious planning and design work involving specialists from other scientific-research institutes? By the way, in capitalist countries where, as is well known, they do not like to throw money to the winds, some 240 firms are occupied with problems of wind-power engineering.

"It is being proposed that, instead of serious scientific work, we buy completed units from Denmark for hard currency," says R. Sarukhanyan. "I remind you that Russian scientists were present at the origins of their creation. We are obligated to resurrect our priority position."

And another item for reflection. It was cited by NPO manager Yu. Starkov.

"There is at Sivash on Arabatskaya a spit that has wind all year round. Such a mighty air flue, eighty kilometers long and two kilometers wide. Thirty thousand windmills could be installed on the spit and two million kilowatts obtained from an ecologically clean source. At one time we, along with USSR Minenergo, were preparing an order to construct a major commercial wind-power plant on Sivash. Now there exist the conditions to begin the construction of such a plant."

Vetroen has audacious plans. The decision has already been made to construct, in conjunction with Minenergo, the first commercial wind-power plant in the country with a capacity of a million kilowatts near Lake Alakol aligned with Dzhungarskiye Vorota, where piercing winds blow.

#### **Experimental Tidal Power Station to Be Built at Kola**

18220067b Moscow IZVESTIYA in Russian  
4 Feb 89 p 2

[Article by A. Blokhin: "The Electric Tide"]

[Text] *The construction of a large experimental commercial tidal electric power plant is projected for the Kola Peninsula.*

The most efficient methods for constructing this and other PESs [tidal electric power plants] using the twenty years of operation of the Kislaya Guba Tidal Electric Power Plant were discussed in Murmansk by planners, researchers and power engineers.

The PES at Kislaya Guba was the first in the world to be built using the so-called floating design. This plant has opened up prospects for the construction of major PESs with minimal expenditures.

Today they are preparing for the construction of high-capacity tidal power plants in England, Canada, India and South Korea using this method (it is called the Soviet method abroad). The development of technical and economic substantiation for two PESs is underway in the USSR—at Mezenskaya Guba (not far from Arkhangelsk) with a capacity of 15 million kilowatts, and on the Tugurskiy Gulf of the Sea of Okhotsk. Its capacity is 5 million kilowatts.

Both plants will be equipped with units intended for two-way operation—during both ebb and flow. These units, planned by the Leningrad Metals Plant, will be tested at the experimental commercial Kola PES, the construction of which should be accomplished in the 13th Five-Year Plan. This configuration of the electric power plant will preserve the natural tidal conditions in the gulfs.

### Negative Aspects of Strikes, Alternatives Discussed

18280125 Moscow *EKONOMICHESKAYA GAZETA*  
in Russian No 17, Apr 89 pp 2, 4

[Article by M. Panova and Yu. Yakutin: "Strike! Strike? Strike..."]

[Text] Why is it necessary? What gives rise to the necessity of stopping work, shutting down the machines, and bringing the enterprise to a halt?

Why did strikes occur in our society from time to time even earlier and why do they occur even now? Who are they aimed at? And isn't the strike itself a paradox when the workers, workers' councils, and trade union committees have been granted the broadest rights of participation in management of production? When both the management of enterprises and government agencies are elected by the workers themselves? In short, when it would seem that every opportunity is available to resolve any conflict situation without resorting to what is frankly an extreme measure.

As a matter of fact, such possibilities do exist. And they are quite substantial and real. But the strikes themselves are just as real. So what is going on? Why do work collectives in the bus yard, at the plant, in the mine, stop work, insisting that their demands be met?

Probably no one will offer an exhaustive and all-inclusive answer today. Indeed, it is certainly difficult to find one. After all, every particular strike has been brought about by its own particular causes, which are related both to political and ethnic motives as well as to the disturbing environmental situation and to the failure to resolve particular socioeconomic problems of the enterprise, the city, or the region, and to working and living conditions.

You cannot, of course, put all of these strikes in one category, you will scarcely find identical formulas for overcoming phenomena so painful to all of us.

But one does note something they have in common in spite of all the differences in the specific occasions for strikes and the demands that are advanced. What is that?

#### "Aren't We Something..."

Quite often the causes of strikes are seen only in a lack of awareness of other work collectives, in egoism, in the emotional kindling of passions which are skillfully used by all kinds of extremists, demagogues, and speechmakers.

It is beyond dispute. Quite often that is exactly the way it happens. There are cases when a strike is declared even when no attempts have been made at all to understand the nature of the conflict, when the consequences of such

a crucial step have not been weighed against the circumstances of the case. "We are striking, they say, and that is that, aren't we something...." There have after all been cases when the workers left the shops and went out into the street, demanding that wages be raised only because the enterprise had made the transition to cost accounting, whereas they still had not earned the funds to raise their own wages. There have also been cases when rumors, imagined insults, distorted ideas about rights served as the occasion for strikes, and the strikers' own duties were entirely forgotten.

Of course, there are also fully justified grievances, but it later turned out that there was no need at all to strike in order to satisfy them. The issue was quickly settled at the negotiating table....

Meetings and conversations with strikers and with their unqualified defenders convince one that a sensational aura of social challenge, of a supposedly higher manifestation of democratic spirit, is being created around strikes. People have even begun to see strikes as a mandatory element in restructuring the life of society and in the pluralism of opinions.

One also has occasion to hear something like this: we owe all our thanks for strikes to restructuring; they move it forward, and that is why they are fully justified. When a strike is condemned, this is perceived by its supporters as nothing more or less than an attack on restructuring itself.

Appealing as they are in their simplicity, such explanations and justifications for strikes are still unsound. Above all because they are not only superficial, not only do they fail to reveal the socioeconomic nature of this phenomenon, but they force one to think that strikes are a benefit for restructuring and an inevitable concomitant of it.

#### Origins and Causes

Yet these explanations turn everything upside down.

It is not restructuring that is to blame for strikes. And the development of the processes of restructuring does not cause them to occur by any means.

On the contrary, it is precisely in the course of restructuring that those problems which sometimes provoke strikes are being resolved. And the most important thing is to overcome alienation of the workingman from authority and the means of production, to establish his position as boss both in the enterprise and in the state.

It is precisely that alienation that creates the atmosphere, the nutrient medium, in which it becomes possible for conflict situations to happen. For instance, often they are



provoked by an ignorance of debatable issues, by postponement of overdue decisions, by bureaucratic delays, neglect of the interests of work collectives, and flouting the principles of social justice.

Strikes have also demonstrated that avoidance of frank and honest talk about the essence of the conflict and ways of overcoming it can be the causes of their occurrence. Quite often, the management of the work collective and local government authorities, knowing the true state of affairs and in possession of the necessary information and sufficient powers to settle the issues in dispute, prefer to pass the buck "upward": "We, they say, would be happy to accommodate you, if they would only let us...."

What is more, knowing perfectly that the strike demands are altogether unjustified and unfeasible, local leaders shy away from the necessary explanations, are afraid to take upon themselves the boldness of saying openly that collective egoism is concealed in some particular demand, dependency in another.... They wait for emissaries from the ministry, the trade union leadership, commissions of every kind.

And time passes, the boiler of public opinion heats up and begins to boil. Striker dissatisfaction with the slowness of the center becomes inflamed, and local leaders, incidentally, do not even always report to the center the events taking place, the demands which have been made, realizing either that they are unfounded or that they themselves are responsible. And if they actually present a picture of the conflict to the center, then it is usually in particularly optimistic tones: "...We will surely sort it out, if not today, then tomorrow, everything will be in order....," again doing nothing to sort it out.

Why is such unprincipled and double-dealing behavior on the part of the local leadership intolerable? Well, first, because it passes on resolution of the conflict to the center without good reason, and second, it strengthens the illusion of the strikers that their demands are just and can be realistically fulfilled. As a consequence, the conflict is only exacerbated.

The causes of strikes related to the many years in the past when the workingman was alienated from power and the means of production lie not only in bureaucracy, not only in the reluctance of the local leadership to take responsibility for the state of affairs, using the entire breadth of the rights granted it.

The low level of political, economic, and legal sophistication resulting from that alienation is also involved here. The strikes of work collectives have also shown their inability to exercise their rights, to get a conflict resolved through constructive dialogue.

### Errors, Both Voluntary and Involuntary

Here again, we can probably say that many strikes have been a conflict between what is desired and what is possible, between the part and the whole, arising out of mythical ideas about the unlimited capabilities of the center. Excessive demands are made to it to allocate resources to resolve particular local problems. Here it is utterly forgotten that centralized resources do not exist, do not come about in and of themselves; they are formed from the contributions of every enterprise and every region, they are used to solve overall problems, they are distributed among enterprises, sectors, and regions in accordance with needs that have become urgent.

Yet, figuratively speaking, if someone wants to enlarge his "share of the common pie," this means that someone else's part has to be smaller. Isn't it better through effective joint effort to "bake a larger pie" and thereby increase everyone's state of well-being?

That other approach, when demands are issued for better division of what is available (to the petitioner's advantage, of course) offers no solution to the problem. The solution lies in the other approach—in increasing the economic literacy of all and of every individual, in developing the cost accounting (*khozraschet*) of enterprises and regions, in distributing the overall resources so as to take into account the product that realistically can be created in the given segment of the economy.

Of course, the information about how much has been created, how much is being consumed, how much is being imported and exported, must be completed, exhaustive, and truthful. Only then will the voluntary or involuntary delusions vanish to the effect that "we are feeding everyone," "others are spending, and we are paying...." After all, it is this kind of mistake and quite often also deliberate disinformation that are used as pretexts for strikes.

The absence of such information has a direct effect on the economic sophistication and political sense of work collectives. It is not surprising that they come under the influence of those who call for strikes to further their own ambitions and selfish goals, their desire to move into the ruling stratum, to win popularity, who cloak themselves in the toga of defenders of justice, who take advantage of unsolved problems.

Consequently, in speaking about strikes, about overcoming alienation of the workingman from authority and the means of production, we must at one and the same time combat both bureaucracy of all kinds as well as the low level of political, economic, and legal sophistication of the workers, which goes hand in hand with it.

This is a suitable place to quote Lenin's words, which have not lost their meaning in our time:

"...Neither the Communist Party, nor Soviet power, nor the trade union can ever forget, and they must not conceal from the workers and the working masses, that the use of the strike as a weapon in a state with proletarian state power can be explained and justified exclusively in terms of bureaucratic distortions of the proletarian state and all kinds of remnants of the old days of capitalism in its institutions, on the one hand, and the political underdevelopment and cultural backwardness of the working masses on the other" (Vol 44, p 344).

V.I. Lenin emphasized here that the working class in a proletarian state defends its own interests "mainly not with the strike (by no means giving it up altogether), but by appealing to the authorities of the worker state" (p 494). And the ultimate goal of using the strike as a weapon in a proletarian state "can only be to strengthen the proletarian state and proletarian class power through the state by combating bureaucratic distortions of that state, its mistakes and shortcomings..." (p 344).

It is extremely important to mention this even today. Does it benefit restructuring to halt production, does this meet the requirements of restructuring, isn't the balance of the interests of the economy, the region, and the given work collective upset in this case? A judicious and full answer to these questions will indicate the civic responsibility and political maturity of the workers.

### Who Pays for the Strike?

Yes, strikes are possible in a socialist society. But that possibility does not mean that they are necessary, not by any means. Coercive pressure is by no means the best argument in a dispute. Especially since the strike is a weapon with two edges, inflicting as it does substantial harm on the country, on the enterprise, and on the strikers themselves.

Nor is it just a question of the economic costs which have an impact on the rhythm of the entire economy and hold back its recovery.

We also should have a realistic idea of the political pattern of strikes and of their consequences.

The point is that a certain element of unpredictability is always present in the way events develop in strikes. They may depart from the peaceful framework, slide out of control of either the strikers themselves or of the authorities, and then acts of vandalism, violence, outright infringement of civil rights become associated with the strike, and a direct confrontation with the official authority begins. All of this is fraught not only with intensified social tension, but it can also result in a limitation of the democratization of our life.

The initiators of strikes usually lose sight of this point, arguing: "If it is worse for the authorities, then it can only be better for us. They will have to make concessions to us...."

This is a dangerous delusion. In actuality, it always turns out that it becomes worse not only for the authorities, but also for the strikers, their families, and indeed all of us. That is why the strike is an extremely undesirable means of solving problems. It is in the interest of society and of the conflicting parties themselves to prevent disagreements from reaching the point of a definitive breakoff of relations and the need to halt production.

As a conflict comes to a head, then, wisdom and restraint of both the strikers and the management, their readiness, desire, and ability to calmly hear the arguments of one another and to find a reasonable solution are especially important. At present, we quite often see either a convulsive reaction of the local authorities to the strike, the desire to extinguish it immediately by forcible action, or to undertake to meet all the demands of the strikers immediately, without question, or to preserve the appearance of order and calm. Both are equally unacceptable, and neither are helpful.

It is said that bosses do not strike. But we should not forget here that we are not talking about individual bosses and not simply about bosses, but about worker-bosses, whose functions as bosses are performed both through their participation in self-management in the enterprise and also through various entities of popular sovereignty in the state system of administration. And if those functions of bosses are not performed, then this itself is already serious occasion for reflection: Why is the system of self-management in work collectives not working, what needs to be done to correct the unwholesome situation?

That is why the problems of strikes in a socialist society must not be underestimated. It is in need of interdisciplinary analysis in its every aspect. The management system and economic mechanism need to be persistently improved, democratic procedures associated with glasnost, appreciation of public opinion, the level of information of the public, and of the particular work collective have to be worked out. The status of the workers as the bosses in production and in society forces us to listen to their opinion, to thoroughly analyze all the arguments, considerations, and proposals.

### Both Rights and Responsibility

Adoption of a law on strikes would be an important means of resolving many conflicts before they grow into strikes and also for raising the level of legal and economic sophistication of the masses and the understanding of democracy in the broad sense of the word.

Such a law, as suggested by the experience of other countries, would have to provide a procedure for thorough prior examination of the points in dispute, of the duties of both sides, of their responsibility for unwarranted actions. And the very process of constructive dialogue will itself afford the possibility of extinguishing the flaring conflict in time, of avoiding an unnecessary excitement of passions, and rumors and conjectures that provoke decisions that have not been well-thought-out.

The law would be a guarantee that the grievances and opinions of the workers and work collectives would be unfailingly examined, not negligently rejected at the outset, and their rights to take part in management of production and government of the state would be reinforced.

Adoption of such a law would be in the mainstream of creating a state based on law and the mainstream of developing socialist democracy. Voluntary decisions cannot be impulsive (if I want to, I will work, if I don't, I will leave work). They must not only be regulated by legal acts, but they must also be controlled by every person's awareness of responsibility for the necessary order in production and in society. It is not only the shortage on the consumer market that needs to be eliminated, but also the shortage of political sophistication, legal procedures have to be devised that preclude intolerance of the opinion of others, deafness to disagreements, and conflict situations.

The main question, consequently, is not that conflicts occur in our society, but in their character, in the methods of resolving them. We need to do everything so that the disagreements that arise between the workers and the management of an enterprise, between work collectives and various government entities, do not take on the character of open confrontation.

For long years, we have denied the existence of economic contradictions in socialist society and have said that the economic interests of the participants in the production process coincide fully. But reality argues persuasively that attempts to avoid noticing the contradictions that exist, the divergence of economic interests, to extinguish conflicts by shouting a peremptory command and with coercive measures result only in stagnation and a growth of social tension.

The resolution of these contradictions and conflicts by democratic means that conform to the interests of both society and every individual is the normal process for development of social life. And it is in our power to see that the possibility of resorting to extreme measures and coercive pressure remains only a possibility.

## Reactions to Norilsk Miners Strike

### Newspaper Correspondent

18280121 Moscow *EKONOMICHESKAYA GAZETA*  
in Russian No 16, Apr 89 (signed to press  
13 Apr 89) pp 20,24

[Article under "Glasnost Against Rumors" rubric by V. Khrebtov, correspondent: "Was This Strike Necessary?"; first paragraph is *EKONOMICHESKAYA GAZETA* introduction]

[text] From time to time we hear about strikes, about conflicts flaring up in various parts of the country between enterprise managements and labor collectives. And recently such a report came in from Norilsk: more than a thousand miners remained at the work faces for five days. For the sake of what? Just what did happen there?

This is the way it was. At midnight on 4 April one of the shifts of miners at the Oktyabrskiy Mining-and-Metallurgical Combine's ore mine refused to leave the face. Within a few hours this news, arriving at other ore mines, caused new refusals by miners to come up to the surface. Workers from the Mayak, Taymyrskiy, Komsomolskiy, Antratsit, and Oktyabrskiy ore mines remained underground.

Initially, demands were made that the ore mines be converted to the second model of cost accounting and in the future—to a lease-type contract. Then demands were made that those workers who did not agree with the rate reclassification be returned to the wage categories which were in effect prior to the revision. Furthermore, the miners demanded that the combine's management carry out the financing of all work concerned with repair and maintenance operations by means of funds for capital construction. Also set forth were conditions connected with the observance of labor hygiene norms, with supplementary payments for working the second and third shifts, increasing northern privileges, and certain other points.

It must be said that these and other demands and problems had been discussed on several occasions, at various conferences, assemblies, and meetings between the administration and the workers. The last time these matters were talked about was in February-March of this year. There were already calls for a strike at that time within the labor collectives of the ore mines. By the end of March people had become emotionally aroused, heated up, on the one hand, by a small bunch of "informals" from the "initiative groups," while, on the other hand, there was the passivity of the administration leaders; things came to a climax....

"Understand us correctly," I was told by one of the strikers—V. Kolomiyets, an electric fitter from the Komsomolskiy Ore Mine—"we all thought of this strike as a possible way to attract the attention of the directors

to our needs. Moreover, we well understand that we've put the combine and dozens of the customers for its products in an extremely difficult position. And we're prepared to make up for the damage by working on holidays and on our days off."

It's easy to say "prepared to make it up"! Because, after all, merely the direct damage which the strike inflicted upon the combine has been computed to total more than a million rubles. But this is only a part of the losses connected with the amortization of equipment, maintaining the vital activities of the idle ore mines, and paying the wages of the idle but non-striking personnel. Due to the shortage of ore, the operational capacities at many of the combine's secondary processing units were working at less than full capacity.

Thus, for example, the Talnakhskaya and Norilskaya Ore-Enriching Factories were provided with only half their normal work. On 7 April acute shortages of raw materials were felt by collectives at many of the enterprise's metallurgical production lines, and, in particular, by such giants as the copper-smelting and Nadezhdinskiy metallurgical plants.

Of course, the strike also seriously affected the combine's economic-incentives funds. During these days the wage fund was short in its daily receipts by an amount of 122,500 rubles per day, and the wages to be obtained by the miners in April will not be so high as usual. Considerable damage was also inflicted on the city's budget. Precise figures still must be determined.

In order to examine and consider the numerous points of the miners' "ultimatum," specialists of the USSR Ministry of Nonferrous Metallurgy flew out to Norilsk. They were headed by Minister V. Durasov, along with O. Shenin, first secretary of the CPSU Krasnoyarsk Kray Committee, and I. Gladkiy, chairman of the USSR State Committee for Labor and Social Problems. However, it took a long time before they managed to examine and consider the miners' complaints.

The strikers, meanwhile, having "acquired a taste" for these things, scarcely let a day go by without setting forth newer and newer demands, which at times were not merely unrealistic but even contradictory. For example, after demanding that the combine's directors convert the ore mines to the second model of cost accounting, the strikers within a few days set forth as their principal condition a revision of the wage rates and a 30-percent wage hike. But, of course, as is known, when working in accordance with the second model, the sole source of all payments is the collective's cost-accounting income, from which the integrated wage fund is formed: what has been earned is what is paid out. There are no limitations on the amounts of the wages if they have been earned. But just what increase in the wage rates and what source of payments were the miners talking about?

I attempted to clear this matter up from the strikers themselves. In response, they shrugged their shoulders: "How were we to know such 'fine points'? We were not instructed in them."

Amazing but true: in declaring the strike with a demand for the second model of cost accounting, the workers had no idea about this form of economic management. So what was the spark that started the fire?

I asked another question:

"And why must the supplementary wage payment amount specifically to 30 percent rather than 20 or 50. How did this figure appear?"

And again an amazing response:

"According to our calculations, this is the amount by which we are supposed to outstrip the wages of miners who are working in similar ore mines of our country. It is said that at present we are almost equal to them in wages despite the fact that we receive a high regional coefficient and polar bonuses. And at other mines, for example, certain coal mines, it is said that the workers receive even more."

These and other "calculations" of the miners were effectively factored in by the economists. It was explained that, in order to satisfy these demands, the combine would need more than 120 million rubles. Specifically the combine, inasmuch as under the new economic-management conditions each enterprise must itself earn the funds for its own needs.

It is clearly the case that, if the directors were inclined to satisfy these conditions, the money would have to be borrowed from the enterprise's other funds. But this means that the miners themselves, along with the metallurgists and workers in other occupations would be deprived of additional vacancies in kindergartens, apartments, and other social-everyday facilities. Even worse, modernization of the combine's production capacities would be delayed for many long years, a decline in the work would occur, which would be threatened by a reduction in the profits being received. And, consequently, the enterprise's funds would also be reduced.

The demand for a wage hike cannot be met favorably for another reason as well. And that is because at all the ore mines (with the exception of the Taymyrskiy) the wages even without this have constantly been outstripping the increase in labor productivity; they amount, on an average per employee of the combine's mining administration, to 632 rubles. Moreover, those miners who work directly at the face, the tunnelers, and electric-locomotive operators receive, on an average 750-820 rubles per month, while the wages of certain miners—those who instigated the strike, as it turned out, amounted to 800-900 to as much as 1,500 rubles per month.

I talked with the miners and cited these and other data to them. And I have become more and more convinced that, if the enterprise's economists had explained to them in good time all the unrealistic and contradictory nature of such demands, there would more than likely have been no strike. P. Pak, a driller at the Oktyabrskiy Ore Mine and one of the strike's initiators, acknowledged the following to me at the high point of the "insurrection":

"We have the feeling that we've gone too far in our demands. So far that we've wound up in a dead-end. Many miners, in particular, those here at the Oktyabrskiy, are ready to begin working again. But we are prevented by a feeling of solidarity with those who have not yet come up from the faces, because, after all, this ore mine of ours was the first one to begin the strike. So how could we be the first to go back on our word?"

Unfortunately, a false feeling of "solidarity," an explosion of passions during these days one more than one occasion took precedence over common sense. Also subordinated to their emotions were certain communists, who took part in the strike (and in certain places even led it). These persons must be held doubly accountable, as stipulated in the CPSU Charter.

...During the latter half of 8 April all the strikers came up to the ground surface. Thus end the Norilsk Combine's longest shift; it had lasted for slightly less than five days. It is undoubtedly true that both the party gorkom and the enterprise's directors will draw the proper conclusion from this episode.

Let's also try to do this ourselves.

Just why did the strike come about? Yes, there were real socioeconomic problems which had been piling up for years at this enterprise. Thus, when new wage conditions were introduced at many subdivisions of the combine's ore-mining administration, there was a formal attempt to specify wage-rate categories for the workers. In a number of cases, they were unjustifiably lowered. They did not provide for the necessary differentiation in wage rates taking actual ore-mining conditions into account, the temperature, humidity, danger of explosions and fires at the faces. There was also a passive attitude on the part of the directors, as well as indecisiveness on the part of the administration and the councils of mine-labor collectives, all of which was taken advantage of by the instigators from the "initiative groups." And, finally, a role was also played by the lack of elementary information on the part of the workers concerning many of the combine's essential production and economic problems.

All this notwithstanding, there is doubt concerning the method by which the miners chose to struggle for their rights. Did they have alternative paths for solving their urgent problems. They certainly did!

All the problems without exception which comprised the foundation of the strikers' demands could and certainly should have been solved without having recourse to such ruinous measures. The rights granted to the labor collectives and to the combine's administration by the Law on Enterprises, as well as by the cost-accounting forms of operation, made it possible to rationally solve all the problems posed by them.

Thus, for example, preparations are already underway to introduce supplementary payments for working evening and night shifts. Of course, this will not occur right away, but rather as funds are sought out and found, funds which, let's emphasize one more time, must be earned for the entire collective—there is no other place to get them from. The wage rates will be recalculated anew, and categories will be restored to those for whom they were unjustifiably lowered. A decision has also been adopted concerning the payment to a family from enterprise funds of a one-time assistance amount of 10,000 rubles in the event that a miner is killed....

Yes, indeed, the USSR Law on State Enterprises has granted significant rights to labor collectives. But, in order to take advantage of them, they must first know them.

For the sake of fairness, let me say that the miners themselves came to precisely this same conclusion after numerous meetings at the work faces. But why did it require a strike for them to realize this?

Having spoken out against the manifestation of the willful, arbitrary use of power and pressure of whatever kind by the ore-mine administration, the miners themselves were not averse to having recourse to the same kinds of pressure methods. Because, of course, a strike is nothing but an "arm-twisting," an application of strong pressure.

The extraordinary event which occurred in polar Norilsk has elucidate how low a degree of political, economic, and legal preparedness there is not only on the part of many workers but also the leading officials of the combine for the changes occurring in society, how great is their inability, and sometimes even their lack of desire to think constructively—in the interests of the common cause.

And one last point. No matter how unusual such as phenomenon as a strike is in our lives with the upsurge of activity and self-awareness of the masses, it is clearly high time that we need legal regulation of the conduct of the parties involved in similar extreme situations. Because, after all, a strike is essentially a voluntary refusal by workers to fulfill the conditions of their labor contract. We must not allow strikes to lead to disorganization and chaos in production, in the smooth, evenly measured operating rhythm of transportation, and municipal services. All the more so must the procedures of conducting "protect actions" be strictly regulated



where this is connected with continuous, non-stop engineering processes, and a heightened danger for people. We must learn how to resolve conflict-type situations at the negotiating table.

### Gladkiy Commentary

18280121 Moscow *EKONOMICHESKAYA GAZETA* in Russian No 16, Apr 89 (signed to press 13 Apr 89) p 24

[Commentary by I.I. Gladkiy, chairman, USSR State Committee for Labor and Social Problems]

[Text] The Norilsk strike certain had objective causes, and the *EKONOMICHESKAYA GAZETA* correspondent has written about them correctly.

The combine's leading officials and economists were incapable of organizing and conducting explanatory work to accompany the conversion to the new wage conditions; they failed to explain their essence and basic principles to the miners. Furthermore, to a large extent, they attempted to carry out this responsible matter in a pro forma manner. This too evoked dissatisfaction among many employees of the enterprise.

Such an omission was skilfully taken advantage of by members of the so-called "initiating group." They played finely and powerfully on each miscalculation, on each mistake of the combine's directors, speculating on the fact that, under the new conditions of economic management, the interests of the workers would be, so to speak, squeezed and shoved into the background. In the final analysis, emotions gained the upper hand over common sense: the miners demanded a one-third increase in wages from the combine's directors.

Was this realistic? Yes, but only on condition that sufficient funds be earned to carry out such a step. Earned by not just anyone but by the collective itself! There is no, nor can there be, any other money either in the combine or in the ministry for raising wages. This should have been explained precisely to the collective so that the people could have soberly appraised the situation and their own possibilities.

The combine's administration and economists did not cope successfully with this task.... And the members of the "initiating group," taking advantage of this, engaged in instigation, threats, setting up picket lines, and attempting to prevent people from going to work.

During the course of the strike the USSR Council of Ministers and AUCCTU appealed to the miners to exhibit good sense and return to work. Their letter mentioned, in particular, that the blame for what had happened lay entirely with a small group of irresponsible instigators whose goals, in the final analysis, had nothing in common with the interests of the labor collective.

I must emphasize once again that the solution of many problems which the strikers had put forward did not require an "insurrection" at all. The combine's administration and labor collective council should have jointly studied the situation which had been created and together sought and found a solution. Which is what they probably would have done in the final analysis.

### Kraykom Secretary

18280121 Moscow *EKONOMICHESKAYA GAZETA* in Russian No 16, Apr 89 (signed to press 13 Apr 89) p 24

[Commentary by O.S. Shenin, first secretary, CPSU Krasnoyarsk Kraykom]

[Text] The week spent in Norilsk at the epicenter of the events there was very difficult. The strikers, fired up by the emotional calls of their comrades to "stand firm to the end," did not heed and at times did not even want to hear any sensible proofs or arguments. How could such a thing occur?

I think that this was connected, in the first place, with the lack of preparedness of most of the miners to work under the new conditions of economic management. The conversion of the miners to the first model of cost accounting did not mean at all that they would once and for all abandon former stereotypes of thinking, whereby an enterprise could request or demand that a ministry or the state could make up for losses and give financial injections.

The situation has changed. If previously this same USSR Ministry of Nonferrous Metallurgy used to take all profits from the combine, nowadays a considerable portion of it remains at the disposal of the enterprise and is distributed to the economic-incentives funds. Only the effective work of the collectives themselves can fill up these funds.

After beginning a strike, the miners of Talnakha directed their financial demands to the USSR Council of Ministers. Why? What were they counting upon? After all, nowadays everyone already knows that the country's budget today amounts to 36 million rubles, and to take money in order to satisfy demands mechanically, unconnected with an increase in output, to raise wages simply by printing more money would make no sense. And such a step would merely intensify inflation, create the illusion of people's growing prosperity, inasmuch as money which is not back up by goods is simply paper.

There is only one solution: Work better and more productively!

And just what did the miners achieve by their work stoppage? In April they lost wages for whose raise they struggled. They reduced the economic-incentives funds of the entire combine. A sad result of poorly thought-out actions....

But I am not inclined to place all the blame for what happened on the workers. A substantial economic "near-sightedness" was manifested by the combine's directors, who did not properly prepare the miners for working under the new conditions of economic management, and who exhibited passivity in satisfying the miners' legitimate interests.

The situation was allowed to get out of hand by the Norilsk party gorkom, which was unable, even during the "precrisis" period to dot all the "i's". I think that the party-economic activists, which will assemble in the immediate future, will fundamentally evaluate the actions of both sides, as well as the actions of the communists, who violated the CPSU Charter.

But if we are to speak about the general situation in Norilsk and Talnakh, it is not any different from that of ordinary days. Social, cultural, and everyday-service organizations, transportation, kindergartens, and schools operated in accordance with their ordinary schedules. Norilsk inhabitants were informed about what was going on in the ore mines by the city newspapers, radio, and television.

In my opinion, however, we must extract the following important lesson from what happened: any socially significant act by a person should be carefully thought out and weighed with a view to ensuring against unpredictable consequences. Because, of course, its price is the political "health" of perestroika.

**Wage Policy, Changes Historically Appraised**  
18280058 Moscow SOTSIALISTICHESKAYA  
INDUSTRIYA in Russian 1 Feb 89 p 2

[Interview by Yu. Vorobeyvskiy with Leningrad economist G. Muravyev: "What Legacy Are We Leaving?"]

[Text] *We inherited neither a large nor a small salary. And "pay a lot—they work well" is a pseudo-economic idea. But what does that mean, to work well? This has not been investigated very much as of yet. And aren't we all familiar today with the dictators on the shop and team scale that are deciding questions of pay with willful strokes of the red pencil?*

*Where did they come from, this evening off, this leveling etc.? We put the question to Leningrad economist G. Muravyev, who has researched the history of wages in our country.*

[Muravyev]: A not-so-ancient story as a beginning. Leningrader V. Aleksandrov invented a highly efficient device. It guaranteed a considerable rise in labor productivity in machine-tool operations. To elaborate: an innovation leads to a tightening of the work norms, but the inventor has the right to work for up to six months according to the prior rate, thereby receiving compensation for his initiative. The economists made a rough estimate that the sum piled up awful fast. And the red

pencil could not "permit" it. A shame—the managers found nothing better than to ban the operation of the device for half a year after its formal incorporation.

How much the enterprise lost is a separate discussion. The story does not end there. Six months went by, and Aleksandrov requested that he an order be issued to him to use the device. His request was satisfied. But the night shift remained before the end of the infamous six months, and the target was overfulfilled by 667 times. With difficulty, through the courts, the inventor received several thousand rubles.

[Journalist] The poles of confrontation, as we see, are administrative arbitrariness, on the one hand, and forced cunning on the other.

**Hourly Pay and the Era of Piecework**

[Muravyev]: In the first years of Soviet power, pay was basically by time. Incomes were gradually leveled.

But the necessity of improving wages appeared even then. Personnel were added to the extent of the rehabilitation of plants and factories. People who had recently been peasants grasped that you could earn the very same wage by working without exerting yourself.

Recall that in the years of the first five-year plans, which required an enormous amount of manual labor, the transition to piecework rates justified itself at first. The volume of operations envisaged by the first five-year plan, as was asserted, was fulfilled in three years and four months. This gave rise to the conviction that piecework was an absolute good. Although it would be worth thinking about some other figures as well. The rise in labor productivity achieved over the five-year plan was half of the planned 83 percent.

They did not pay attention to that contradiction at the time—all problems were solved through the application of large masses of people. But that delusion has been passed down to us.

No fundamental difference was seen between manual and mechanized labor in those years. Whereas output was roughly the same everywhere under the sway of pick and shovel, it began to make the most improbable jumps with the incorporation of technology. But they continued to "chop" the rates and norms identically every year by ten percent through willful efforts. Wages began to jump. If all were paid by piece rates, by the item, then those that were lucky enough to have better working conditions and more advanced equipment proved to be in a privileged position.

[Journalist] There's the socialist principle of equal pay for equal work for you! A provision banning transfers was instituted in 1940, evidently very much "by the way," so that this "theory" would wear out and not begin racing from one enterprise to another.

[Muravyev]: Those left behind in the wage race that had started were forced to use exceedingly doubtful reserves for growth in output. Violating procedures, for example.

[Journalist] You can find the heirs to this tradition through the present day. The most candid of my interlocutors have told me how they machined a part in two passes instead of ten passes with the same cutter. But the surface of the part was weakened due to overheating. And although the part was geometrically ideal, you got concealed scrap. Many "initiatives" were unfortunately born on such a basis.

Another reserve in the race for output was the life and health of people. It was namely in 1933 that the Narkomtrud [People's Commissariat of Labor], created by Lenin and answering for questions of safety measures, was dissolved. Under conditions of total shortage, one thing became law—more, more, more. At any price.

The legacy is preserved to the present day. Some 90 percent of the production workers polled by sociologists emphasize that it is namely the observance of safety measures that reduces earnings. Specialists note, for example, that in the mines they sometimes cover the instruments showing the gas content at the workface with their jackets—just don't stop the work.

[Muravyev]: The accumulated errors created the necessity of a third restructuring, which was begun in 1965.

In particular, it created an economic system instead of a subjective one for the review of norms. Recall that after their tightening, an innovator can work for six months according to the old norms.

[Journalist] But the story with V. Aleksandrov shows that the administration does not always go for that and it is not always profitable for the piece-rate worker.

[Muravyev]: Whence the concealment of new tooling raising labor productivity from the norm-setter. When reserves have once been hidden from the norm-setter, he cuts the norms by eye, by volition. Piecework under contemporary conditions is the legacy of forceful methods.

The 1965 reform showed one very important thing. Attempts to incorporate economic methods of business operation remain just a noble impulse if they do not take into account the material interests of each worker. It was not new economic thinking that triumphed in the third restructuring, but the legacy of the old. Namely because the objective preconditions for bureaucratic administration were left. Piecework in particular. The planned increases in labor productivity over the 9th-11th Five-Year Plans were 36-40, 25 and 17 percent respectively. And we got 23, 16 and on the order of 14 percent.

In my opinion, the fourth economic restructuring is underway today.

And today it is namely piecework, not grasping technical progress as before, that is making the biggest holes in the budgets of cost-accounting enterprises.

### This Is Our Restructuring

[Muravyev]: Decrees that have been promulgated along with the State Enterprise Law oblige enterprises and ministries to take steps to improve wages. That is, those that defend collective interests—but personal and social interest still exist. They are not connected.

For those that operate a machine tool, today's additional piece-rate earnings are more tangible than the cost-accounting profits out of which they, maybe, will get something next year.

Violations of justice in pay are not only morally detrimental, but are economically disadvantageous as well. Who has totaled up the losses from the colossal migrations of people in search of "hot" jobs? Who has totaled up the losses from the strikes that are declared by workers seeking higher pay? Their demands, as a rule, have had to be satisfied under conditions of personnel shortages. With the aid of evening off, wages are urged on by hook or by crook under the common standard of the city and the region. Take the indicators of the average fulfillment of norms at the enterprises of various sectors. The scattering is quite large. So the differences in the wage scales, of which there are, as in the old days, many, are made up for by evening them off. A continuation of the policy of "privileged" sectors costs "a pretty penny," as we see.

[Journalist] But how can piecework and evening-off be fought?

[Muravyev]: The USSR Council of Ministers, and not individual enterprises and ministries, should set a unified system of rates for all (except for unhealthy types of production). Otherwise the same practice will continue. And more and more money will be spent that is not backed up by goods.

A chain can be discerned here: an easy output norm—easy money—a devalued ruble. And the chain stretches back to the thirties, forties and fifties.

[Journalist] If we incorporate leasing and cooperation widely and begin to sell shares of stock to the workers of enterprises, then they, having become genuine owners, will operate to full return without any norms. I have heard the opinion that you should let people earn and they will find ways to divide the money themselves.

[Muravyev]: But what here could be the criterion other than a technically substantiated norm? Peoples' intuition? A very shaky foundation for economics.

A norm is not simply a tool for the distribution of income. Tightening them up is an opportunity for obtaining profits through reductions in product cost rather than price growth. This is advantageous to all. This means that the norm is an economic category able to unite the interests of the individual, the collective and society.

[Journalist] That is a technically substantiated norm. But under the conditions of piecework, it cannot be one.

[Muravyev]: The enterprises of Glavsportprom [Main Sporting-Goods Industry Administration], for instance, are already incorporating scale and bonus pay for automated and mechanized operations. Supplements to the basic rates should be added not for overfulfillment, but rather for review of the norms. This means that they will be as tight as possible at any given moment. They are making technical creativity and the assimilation of new equipment the same.

The supplements (for those such as Aleksandrov) could be as large as you please. It is not the self-seeking individual that gains from this, but rather the person who is making both himself and society richer. That same inventor. By the way, in the realm of tooling and machine-tool building alone, a third of domestic inventions belong namely to the workers, in whose intellectual potential some commentators have strong doubts.

[Journalist]: If you look at it closely, a piecework supplement to earnings under the conditions of scientific and technical progress is an unofficial rent. What is the piece worker receiving dividends on? On the tooling he has thought up and is concealing it from society. Using the assimilated machine tool, rejecting the new one. Using already-acquired skills, not desiring to improve them.

If we do not get rid of that legacy, what legacy will we ourselves leave? Won't our children be going about in crooked boots made by a piece-rate worker on jagged asphalt with devalued rubles in their pockets?

### **Changes in Cooperative Activity Legislation Recommended**

18280085 Moscow OGONEK in Russian  
No 6, 4-11 Feb 89 p 25

[Article by Pavel Bunich, USSR Academy of Sciences corresponding member: "How Should We Regulate the Cooperative System?"]

[Text] A New Year's gift to cooperative members—yes, and to all society—was a decree with the modest title "On Regulating Certain Types of Cooperative Activity in Accordance with the USSR 'On the Cooperative System in the USSR' Law."

It is sufficient to read the enclosure to this document in order to find out that "an extremely large part of the cooperative sector is called 'certain types of activity!'"

The stipulation: in compliance with the law, also causes one to prick up one's ears. It's as if everything that is now being done in the country should correspond to the laws—this truth does not need constant repetition. Here, however, it seems that the document's authors wanted to prevent any possible reproach that they were at times deviating from the principles of the law toward old positions.

The decree begins with a statement that it is regulating the cooperative system in compliance with Articles No 3 and No 54 of the Law on the Cooperative System. Before looking at these articles, let us quote extracts from other ones since the decree should correspond to the law in all of its articles and not in some. Article 1 says: The state supports the cooperative movement in every way possible and assists in its expansion. Is it correct, however, to consider the closing of a number of cooperatives, which is taking place, to be every possible state support for them? The simile of a rope, which supports someone in this manner, automatically surfaces. Since when can narrowing be regarded as being identical with expansion? Previously, these concepts were thought to be opposite pole ones.

The introductory part of the law states that it is aimed toward the "equal interaction of the state and the kolkhoz-cooperative sectors." The decree introduces a long list of types of activity which cooperatives have a right to engage in only on the basis of contracts concluded with enterprises, organizations and institutions and for whom these types of activity are the primary ones. In other words, the work of cooperatives depends on the agreement of high suzerains. In many cases, I think, they will receive this concurrence—for good relations, services and a bribe paid into their own pocket which is the equivalent to a bureaucratic racket (in addition to existing extortions by "individual" local police, medical sanitary station, fire protection, architect services, energy supply, etc., agencies). However, is it permissible to assess the relationships between a worker and a proprietor as being equal? Only relationships between proprietors, where all are such and no one possesses the privilege of determining what is good and what is bad, seem equal to me.

Now, the articles to which the decree refers. Article 3 says that "a cooperative has a right to engage in any type of activity with the exception of that forbidden by law." It is not necessary to object to this statement in principle. There are types of activity which are not permissible for the cooperative system (just as for the state sector). No one can manufacture weapons, ammunition, narcotics, and toxic substances; organize and support gambling establishments; hold games of chance; make bets on various contests; manufacture and use registered trade marks and firm names; and produce decorations, medals, seals, stamps (except special enterprises).

Naturally, neither the cooperative system nor the state sector has a right to manufacture and sell general food products under conditions that do not satisfy sanitary



requirements or use food additives forbidden by medical norms and rules. The prohibition against using foreign firm symbols, deceiving consumers with a false ad, and producing and selling goods with hidden defects could have been added to this list. For some reason, the decree does not contain these limitations. To no purpose. In return, prohibitions, which seem redundant and unsound to me, are being introduced. For example, the manufacturing of medicine is not being allowed. Why? If it satisfies permitted licenses, the medicine produced by cooperatives can fully compete with medicine produced by the state sector.

The striking out of publishing activity also seems debatable to me. We have a hunger for literature. There are not enough capacities, paper and publishers. It is difficult to force one's way through the palisade of relationships and stereotypes that has taken shape. Here, a cooperative system is appearing that is adapting base-ments for printing-houses, repairing or leasing unused capacities during its idle time, organizing the reprocessing of spoilt sheets into paper, and producing new titles for the book market. It would seem that this entire phenomenon is a worthy one and not a stagnant one. But no. Close that which was opened, and henceforth do not open!

A taboo has been placed on the production and circulation of movie and video products and the corresponding external economic activity. This will hinder the overcoming of our enormous deficit in satisfying the population's need for movie and video films and will strengthen the state monopoly that has taken shape—with all of its harmful consequences.

The state does not produce icons, church plates and items of religious symbolism and attributes. Now, cooperatives cannot produce them also. The entire "weight" of this work lies on the church and on people whom it has a right to freely involve in their production. Where is the gain?

Nevertheless, our life is a strange one. The kettle-drums have not become silent in connection with the first cooperative schools and the committee on education favors the freedom of teachers to select teaching methods—and now there appears a decision on the inadmissibility of cooperatives organizing general educational schools. Someone says: The cooperatives are teaching badly. Excuse me, but this training will end with the disappointment of the pupil who will himself leave and force others to be on guard. Another argument: They say that stratification will arise between children from better and lesser well-to-do families—as if it did not exist anyway. The differentiation in incomes, which is occurring, will not decrease this gap but increase it.

A considerable portion of cooperative activity has been placed under the control of contracts with state public enterprises. The manufacturing of perfume and cosmetic items and household chemical goods has fallen into this

category although the observance of the rules for their production (the same as in the state sector) is sufficient to insure the necessary quality. The same thing can be said about the manufacturing of duplicating and copying equipment and the production, circulation and sale of phonograph records and magnetic tapes. The lecture activity of cooperatives, which is deliberately considered less reliable than similar work in VUZ and the Znaniye Society, has been put under a contract.

Now, concerning Article 54. It is the last, the smallest and seemingly the most inconspicuous one. The article states that the USSR Council of Ministers determines the distinctive features in the application of the Law on the Cooperative System in the individual branches of the national economy and individual types of cooperatives. When the law was still in draft, I participated in a number of discussions about it. It happened that the participants in these energetically opposed any hazy points, seeing in them a loop-hole for its subsequent use against the cooperative system. They said that if the law consists of holes like cheese, this would be extremely negative. Such suspicions seemed groundless to me. I assumed that ambiguously sounding statements do not have the worst case in mind; they must be understood only in the most progressive sense. The skeptics, however, were correct. More accurately, even they did not foresee such a turn of events. Whereas the law reinforced the "features" for the union government, the decree, which was adopted "in accordance with the law," granted this right to the union republic councils of ministers for the first time. They can introduce new limitations.

It seems a mistake to me that such substantial adjustments in the cooperative formation were introduced without their preliminary discussion in a spirit of glasnost. These changes were prepared in a "working manner" and sounded like thunder from an otherwise clear sky.

Where did this strict policy regarding the cooperative system come from? What is its real underlying reason? I think that it is the high incomes of the cooperatives which exceed the earnings in the state sector several-fold. They are caused, first, by the significant weight of the cooperative members' interest in working and their increased productivity, enterprise and flexibility in updating production by searching and making risky decisions. Secondly, they are connected with the apathy and lack of competitiveness in the state sector, the concealed pumping over of its assets in favor of cooperatives (it is sufficient to recall the exorbitant prices paid by state enterprises for cooperative services and the resale of many types of primary and secondary raw material and equipment to cooperatives at dumping prices) an inert and primitive taxing policy regarding the cooperative system, the bureaucratic restraint on its activity and the origination of cooperative monopolies. The cooperative system does not make payments for labor resources and is free of turnover tax payments.



In reply to approximately the same statement expressed by me in OGONEK previously, I received letters from cooperative members in which they stated that it is not they who "are plundering" but they who are being "plundered": They purchase part of their production assets at prices having an increased coefficient, they are completely refused many production assets, they are even banned from purchasing in state stores, and they are forced to answer within the limits of the cost of all their property and not within the limits of cost accounting income as do state enterprises. More and more frequently, cooperatives are being asked to leave the premises leased by them. All of this indeed hurts cooperatives, but ... does not enrich state enterprises, does not provide them advantages, and does not pump cooperative income into their pockets since—within the framework of the present financial system—the "surpluses," which have originated in state enterprises, are automatically scooped out by the budget; however, "arrears" on the contrary, are covered by it. As a result, no matter what privileges the state sector receives, it is "not threatened" by anything and does not provide an increase in wages. The cooperative system has chances for successes when it operates actively.

What is to be done? The tactics should satisfy strategy and not contradict it. That is why it is impossible to construct a new cooperative system using administrative and strengthened repression measures that have proven their lack of any prospects long ago and repeatedly.

When cooperatives are closed without any weighty justification, the investments in them disappear to some degree. Losses appear from this peculiar type of expropriation and nationalization and a general lack of confidence in tomorrow, which paralyzes interest in future accumulations, technical progress and progressive economic development for continuously operating forces, arises. This is fraught not only with the curtailment of cooperative reforms today but also with the loss of confidence in it on the part of potential participants in the movement.

As M. S. Gorbachev has pointed out, it is necessary to work more skillfully with the cooperatives and to consider the experience in their development in Russia during the first years of Soviet power, in the socialist countries, in Sweden, and in Norway where the administration of cooperative production has had and has economic methods based on their own base. The main ways to overcome the distortions in the cooperative movement are: renewing the state sector on the basis of a cost accounting that is equal to the cooperative system, aligning the conditions for its activity with state enterprises and the speeding up of cooperatives.

It seems that it is still not too late to learn and take into consideration all the variety of opinions in our society, including those of the cooperative members, regarding adequate and correct measures to regulate "certain types" of their activity.

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## AUTOMATION, AUTOMATED SYSTEMS

### Engineering Centers Help Enterprises With Automation

18230041 Tashkent PARTIYNAYA ZHIZN in Russian  
No 2, Feb 89 pp 26-33

[Article by N. Muminov, deputy general director of the NPO "Kibernetika" of the UzSSR Academy of Sciences, doctor of engineering sciences: "How To Increase the Efficiency of Flexible Production Systems"]

[Text] New generations of technology cannot be built on the old foundation. The scientific-technical, technological, and also organizational level of machinebuilding must be up to the tasks which have been placed on it. The needs of the economy are met most fully by flexible automated production (GAP), which can at any time be rearranged to produce products with new performance characteristics. It is based on flexible production systems (GPS), groups of operating devices (machine tools, robots, sets of machines) furnished with program control.

It has been assumed that the main leap in raising productivity of labor would occur at the boundary of the nineties, when GPS would no longer be created on an experimental basis, but in series production on the basis of a new organization of work, the appropriate equipment, technology, and so on. But the real state of affairs has proved to be somewhat different. Last year alone, about 300 GPS were built in the Soviet Union, and by the end of the FYP their total number is to increase to 2,000. So that a breakthrough has been outlined from the purely quantitative standpoint. Nevertheless, as scientific authorities have been testifying, the flexible systems created in the country have not yielded the anticipated spurt. What is more, a sample survey of 16 GPS has shown that they are all ineffective from the social standpoint and are a losing economic proposition. For instance, five GPS with a total cost of 26.9 million rubles yielded losses of 260,000 rubles instead of the promised annual benefit of 3.5 million rubles. Their operation on two shifts eliminated 24 jobs instead of several hundred; that is, elimination of one job slot cost more than 2 million rubles. It has been found that the present-day GPS cost 20-30-fold more than sections equipped with equipment equivalent in technological capabilities and flexibility that has not been automated. That is why the unit cost of the product produced on such GPS is 3-4-fold greater, and the output-capital ratio is between one-twelfth and one-fifteenth as great.

What are the objective reasons for the inefficiency of flexible systems? As rightly noted by Z. Lvov, corresponding member of the USSR Academy of Sciences, the "key reason why the GPS operate at a loss lies in the very approach to their creation. The defect in the approach is the lack of a scientifically sound conception of flexible automation." The point is that producers are operating

in the old way; for them, the main thing is to produce the largest possible output within the planned period of time. Even today, they are looking exclusively to the growth of the quantitative indicators of their performance, while the prospects for the enterprise's development, its effective and up-to-date modernization, do not really interest anyone. Strange as it may seem, this state of affairs has been reinforced with the adoption of cost accounting (khozaschet). Everyone believes that one bird in the hand is better than two in the bush; that is, it is better to realize guaranteed profit today than to introduce new technology and wait until it pays off and begins to yield net income.

Practice of this kind was fully justified in the period of the stagnation. Managers knew that however poorly they performed, whatever mistakes they committed, the state would support them with subsidies and would not allow the enterprise to go under completely. But times have changed, restructuring and the broad application of new economic methods will have the result that only those plants and factories that prove sufficiently independent and competitive in the context of an evolving socialist market will preserve their status and survive.

And in that context the enterprise that will have the strongest position will be the one in which the collective understands that you cannot travel far with the old equipment, that thought must be given to the future, and the future lies with those who do not turn away from the advances of science and technology, but go forth to embrace them. The fact that flexible systems and numerous ASU are ineffective today does not at all signify that they are not necessary. It is rather a question of the enterprises themselves not having risen up to their level with respect to many parameters. As noted by K.V. Frolov, member of the academy, "the course of applying ASU at enterprises is the correct one. It is just that this approach requires that production as a whole be raised to a new level, because ASU are effective where the entire production operation has been automated. But if a large portion of the output at a plant is produced with manual labor, then outlays for ASU represent money thrown to the wind."

It is unfortunate that even today some managers look upon automation as Ali Baba looked at the cave containing the treasure. It seems to them that it is enough to bring in several robots, automatic production lines, and various types of ASU and they will immediately begin to enjoy all the benefits of scientific-technical progress, and everything will be fine. However, as calculations show, a simple increase in the share of automatic equipment cannot in itself furnish anything to the economy except an immense loss.

What is necessary so that the new technology is not merely introduced, but also operates efficiently? Before flexible systems and ASU for process control are created,

thought has to be given to the most determined improvement of the elements of their design—the manipulators, the robots, and configurations containing them, accompanied by a reduction of their production cost.

But even if we have good technology, we have to know where and how to use it. There have been well-known cases in our country in which plants and production associations have acquired imported flexible systems, and then dreamed about getting rid of them, since it turned out that they did not fit into the technological structure of the enterprise. There is only one way to avoid such mistakes: interdisciplinary expert evaluation of enterprises in order to identify the segments that can be robotized and automated.

This is where science comes in. For instance, scientists of the Uzbek NPO "Kibernetika" have prepared a brief guide for enterprises to use in robotizing production processes, and they have also developed a method for preproject study of plants and factories so as to discover the possibility for applying flexible production systems.

There is no doubt that without prior expert scientific appraisals any robotization will be blind and extremely inefficient. Many managers are beginning to understand this, and it is no surprise that an ever larger number of enterprises are taking the initiative to have them examined by experts. They include the Kokand Hosiery Spinning Association, the Tashkent "Avtomatika" Plant, the plant "Chirchikselmash," the RPO "Uzavtoremont," the Tashkent Footwear Factory No 1, and others. Unfortunately, at present the performance of this important measure is random and unorganized.

In this respect, we also have reason to reproach ourselves, especially since the NPO "Kibernetika" is the head organization for supervision as to scientific methods and for coordinating the introduction of robotics and automated control systems—the most important components of flexible automation of production. The association's performance has been seriously criticized by party and economic authorities. Rightly so. We have been too much engrossed in training personnel with higher qualifications to the detriment of our main task—effective promotion of technical progress in the sectors of the economy and above all in machinebuilding.

We have drawn sobering lessons from the criticism. The entire activity of the NPO is being consistently restructured so as to bring it closer to the specific needs of production. A series of scientific-production complexes (NPK) has been created in accordance with the priority lines of scientific-technical progress; their task will be to develop and introduce applied research to economic practice. Among them, an important role will be played by the "Machinebuilding" NPK, which brings together several research laboratories of the Cybernetics Institute and also the computer center and departments of the design office.

Taking into account the proposition of the 27th CPSU Congress to the effect that priority must be given to the reconstruction and front-running development of the machinebuilding complex, we have concentrated our principal attention on shortening to the utmost the path from development of new design solutions to their application in production.

An important step along that road was creation of an engineering center based at the Tashkent Motor Plant, which is under construction. What is referred to as a temporary production center is already operating there, and it has become a kind of testing ground for sophisticated new equipment and automated systems for controlling processes and production operations. But the purpose of the engineering center goes beyond the limits of just one enterprise. Essentially, the model of the automated production operation of the future is being worked out here.

Our country already has experience in creating engineering centers of this kind. Specifically, one of the first such associations called upon to speed up development and application to production of the advances of scientific-technical progress was formed as a component of the Electric Welding Institute imeni Ye. Paton in Ukrainian SSR. The experience of this and other similar centers has been taken into account in drafting the regulation on the engineering center "Motor." The regulation sets down the rights and duties of the two interacting parties—the Tashkent Motor Plant and the NPO "Kibernetika." The day-to-day course of operations will be directed by the scientific-technical council on which representatives of the plant and association sit.

Exactly which tasks are performed here by the specialists of our association? The regulation on the engineering center puts it this way: application of automated systems for management of production (ASUP) and for process control (ASUTP), as well as computer-aided design systems (CAD) and their subsequent rise to the level of an integrated (unified) control system (IASU). Provision has been made for providing scientific-technical assistance in the mastering of progressive technical solutions, including robotic complexes, flexible production systems, computers, and so on. Priority is being given to production operations using the engineering center's developments, consultation is provided, and personnel of the enterprise are trained so that new equipment and technology are applied more rapidly and operated efficiently.

It needs to be said that the design of automatic control systems, especially at the level of the entire enterprise, is a complicated and lengthy process which usually takes years, and application takes just as long. Under the conditions of the engineering center, the possibility exists of carrying on these two processes simultaneously, which means speeding up the effort greatly. It is also significant that the collective of the enterprise is showing

a great interest in the development projects of the scientists. We have really developed an effective creative cooperation, which was prepared by a mutual desire to speed up things.

The center consists of the appropriate subdivisions of the Uzbek NPO "Kibernetika," of departments, shops, and sections of the TMZ and of the scientific-production educational complex. In 1978 and 1988 alone, five developments were turned over to the TMZ for application in various forms depending on the plant's needs. Specifically, the plant was delivered a set of programs for selecting the basic manufacturing equipment (machine tools with numeric programmed control) of a GPS based on the YeS computer using the "Spektr" SUBD, whose anticipated economic benefit was 41,800 rubles. In addition, plans call for applying at the Minsk Motor Plant this year a set of programs for automated interactive synthesis and generation of flexible production modules in machining operations based on the SM-1600 computer and the RV Z.O. operating system. The preparatory work has been done to apply automation equipment, and technical assignments have been done on an ASUTP for machining and warehouse management.

The engineering center is in general a going concern. Does it have problems? Absolutely. Like any major initiative, it has not been without its difficulties. The most important of them is that the TMZ is an unfinished enterprise; that is, it does not have its complete plant and equipment, with all the consequences that ensue.

The regulation on the engineering center states that its creation was aimed at speeding up the integration of science and production. Its main task is to develop, manufacture, and apply flexible production systems using standard automation equipment, computers, and industrial robots. So that the center could operate with full independence and effectiveness, a regulation has been drafted and approved concerning financial and legal activity; in it a separate point provides for material incentives and stimulation for performance of particularly crucial projects. But even a document that has been well-thought-out and thoroughly checked does not always square with reality by any means. Ye.P. Velikhov, member of the academy, says: "World experience shows that for every ruble invested in science, approximately 10 rubles have to be spent to work up the engineering of the ideas. And then another 100 rubles to set up production, study markets, organize sales, and provide servicing. Expert scientific evaluation has become an inseparable element of scientific activity, one that requires maximum responsibility and large amounts of time. That is why as much as 10 percent of the funds allocated to basic research is spent on performing expert evaluations in the United States. That seems to be the road we should travel as well."

But often in our academy institutes the situation is this: we allocate 1 ruble for science, the 10 rubles to do the engineering on the ideas we get hold of somehow,

perhaps even with the help of policy-making bodies, but the 100 rubles necessary for the practical application of the ideas, we are simply unable to get. For example, 500,000-600,000 rubles are allocated to develop particular systems, but only 50,000-60,000 for its application, which is clearly not enough. As a consequence, performance of the project is mothballed, and the funds invested are wasted. However strange it might seem, the blame is put on the system's developer, not on the client, who has not provided the conditions necessary for its application and use.

A similar situation has come about with the engineering center. Here, finished developments of various kinds of ASU cannot be applied because the computers are lacking. We talk a great deal in our country about the need to integrate science and production; this idea has become a commonplace in all speeches and articles devoted to the problems of acceleration of scientific-technical progress. But as soon as it comes to practical realization of this idea, strange and incomparable things happen—trumped-up delays in delivery of the necessary equipment, and if it does arrive, then sometimes it lacks the appropriate technical documentation. We need not go far for an illustration: the TMZ has acquired imported equipment, but its technical parameters are unknown, since the technical documentation for it has not been fully studied.

In general, we should note that the application of new technology is a stumbling block for academy and sector NII, but even for such large organizations as intersector scientific-technical complexes (MNTK). Thus, S.N. Fedorov, general director of the MNTK "Microsurgery of the Eye," has written in an article entitled "A Prescription for Everyone" that for them application remains the same unsolved problem it was before. Yet the MNTK have certain privileges and are under the protection of policy-making bodies.

But let us go back to the computers which the engineering center has been unable to acquire for a long time now. This is the picture: construction of the TMZ will be completed in 1990, certain sections have been operating since 1987 and are already producing products. The equipment of the plant in operation was designed to operate in a unified regime with the ASU. It could happen that by the time the computers finally arrive, the basic equipment is already obsolete and physically worn-out, and then another problem arises, one that at present is insoluble: How to unify in a single cycle worn-out machines and the newest automation equipment?

The situation has been greatly aggravated in connection with the transition to cost accounting, since the procedure for financing ASU has changed. To be sure, it is not altogether clear how enterprises under construction can be converted to cost accounting. The TMZ is yielding no profit at present, which means that it does not have any money to acquire computers.

Knocking on official doors has produced no results, although everyone is ready to admit that the engineering center needs the computers. For instance, a field session of the department for mechanical engineering and control processes of the UzSSR Academy of Sciences, held 5 May of last year, noted that solving the problems of acquiring, installing, and operating additional computers would help to speed up the application of the developments of the engineering center and that a rapid social and economic benefit would be achieved thereby. The bureau recommended in this connection that help be sought from policy-making bodies. One gets the impression that actually this problem cannot be solved without the help of the UzSSR Council of Ministers and UzSSR Gosplan. Who specifically is to blame that the engineering center is still not functioning effectively enough? First of all, the branch ministry; after all, both the TMZ and the center itself are under its jurisdiction.

The letter we sent to the ministry asking for its help in acquiring the new equipment went unanswered, and its head organization, the NPO "Ritm," answered our request with a standard form letter that signified nothing.

Perhaps the engineering center has not justified the funds already invested, and the ministry does not want to associate itself with an unpromising organization? Let us see what competent specialists have to say.

Reactions to the activity of the engineering center have been offered at different times by Ye.P. Popov, corresponding member of the USSR Academy of Sciences, and A.P. Slobodskoy, deputy chief engineer of the PO "Minsk Motor Plant." In his opinion, Ye.P. Popov wrote that "the performance of the 'Motor' Engineering Center has immense importance in overcoming the psychological barrier that has formed in the personnel of enterprise management and engineering and technical departments themselves in connection with broad introduction of automation and computers into the process of their work activity. This has been accompanied by a substantial social benefit."

A.P. Slobodskoy has for his part noted that the center "is carrying on a fruitful effort to create and apply at the TMZ an automated organizational and technological system (ASU OT) whose financing amounts to about 1.5 million rubles." He emphasized in his conclusion that on the whole the center's activity has been favorable and deserves attention as a new direction in bringing science and production closer together. In February 1988, a technical conference was held in Kharkov in which representatives took part from the PO "Gidrotraktorselmash," the NPO "Ritm," the Uzbek NPO "Kibernetika," and the TMZ; it discussed progress in carrying out the program for development and application of the TMZ's ASUOT over the period 1986-1990. Particular attention was paid to allocation of the funds necessary to purchase computers. In the technical conference held with the same participants in April 1988, a decision was

made "to ask the main scientific-technical administration and equipment administration of the ministry to provide assistance in the acquisition of computers and up-to-date machining equipment."

Which makes it evident that the activity of the engineering center is not isolated and does not represent some accidental and insignificant phenomenon, but has direct business and creative ties with the largest machinebuilding enterprises and scientific-production associations in the country.

We are far from thinking that bad people are sitting in the USSR ministry whose only thought is how to hold back scientific-technical progress. The point is that the very system for management of scientific and engineering developments has continued to be the administrative command system up to the present time. Which means that we need to be bolder in breaking up everything that hinders the evolution of new economic relations based on true cost accounting, self-financing, and self-support, a lively and direct interest in the results of work, and a steady desire to attain the level of world standards must be in the first place.

Why are we so insistent on prompt delivery of computers? Well, to put it figuratively, because we do not want to redig the same trench several times in order to install in it first the sewer lines, then the water lines, and finally the gas lines. At the TMZ, for example, only simultaneous introduction of the automation equipment will guarantee the anticipated economic benefit. And if we introduce the ASU for various purposes depending on the arrival of the computers and other necessary equipment, then nothing good will come of it. The TMZ could find itself in a state of technological chaos, and all of our developments would be simply doomed and would become losing propositions.

We would like to believe that the restructuring of the economy also pertains to this aspect of economic activity, since improvement of management is directly related to the level of development of electronic information.

In spite of these hindrances, applied research is not stopping. New prototypes of products and pieces of equipment are being tested in the association's experimental plant, and models simulating manufacturing processes are being verified on our own computer. Time is pressing. In 1990, in what amounts to just a year, the first phase of the motor plant's automated production must be put into operation. Then, those that follow will be introduced in stages.

Scientists, engineers, and plant specialists are working with great interest and with an understanding of the significance and importance of the new project. We would especially like to note the creative contribution to applied research and application of finished developments of M. Agzamov, the new department head of the



NPO "Kibernetika," E. Mirsaidov, chief project engineer, Kh. Ishchanov, chief of the laboratory, scientific associates Z. Shamsiyev and B. Ismailov, and also the plant's chief engineer E. Borkovskiy, R. Sarkisyan, deputy director for economics, and the leading specialists U. Khodzhiniyazov, V. Vorotnikov, and A. Mironenko.

It has to be said that the party committee of the scientific-production association has been paying great attention to applied research in machinebuilding and in particular to operation of the "Motor" Engineering Center. Practically all the leading scientific associates who have been working on this problem report regularly on their work to the shop party organizations and the party committee. For them, this is not only an everyday scientific and engineering effort, but also an order from the party—to complete the program for applied research and application of scientific developments to production that has been outlined and to do it on time and at a high level of quality.

The fact that flexible automation of production is being introduced at a new plant that is under construction makes the task easier in a sense. It is possible to preclude from the outset incompatibility of production operations, which is today one of the basic obstacles that stands in the way of application of new technology. This problem is far more acute at existing enterprises whose production structure is already shaped. The reason is that present-day enterprises have a high level of versatility, they perform various technological operations, but each of them separately is not as a practical matter able to put a full load, on three shifts, on the flexible production complex specialized in a particular type of components. Which means that in and of itself none of these production operations pays off. Unfortunately, this situation has become commonplace.

There is one way out: several enterprises with various types of technology have to cooperate. It has become indispensable to create regional flexible automated production centers (RGAPTs), which under the conditions of cooperation would take over the function of guaranteeing continuous operation of production processes and equipment.

Creation of regional centers is not a whim of scientists, but a real necessity suggested by reality itself. The party has defined the retooling of enterprises as the principal way of renewing the plant and equipment of machinebuilding and of speeding up scientific-technical progress. The bulk of state capital investments is not going to new construction, but to radical construction of existing enterprises and to major renewal of machinebuilding's plant and equipment. Even now, shops are being saturated more and more with highly productive new equipment; at a number of machinebuilding enterprises in the city of Tashkent there are robotic complexes, machining centers, and machine tools with numeric programmed control in operation. But the coefficient of their utilization is not high as a rule because they are underloaded.

And this process will evidently be compounded more and more. Cooperation among production processes, however, affords the possibility of putting a full load on highly productive and expensive equipment.

The creation of RGAPTs must be preceded by a feasibility study of all aspects. In the first stage, there is an evident need to conduct an expert technical examination of the machinebuilding enterprises of the city of Tashkent. After all, by no means every enterprise is today in a state of applying robotic complexes and flexible automation. This requires a certain technical and organizational level of production. Otherwise, this measure makes no sense at all. There are enterprises where the robots introduced have eliminated only one job per shift or less than that. Who needs that kind of automation?

Industrial robots need to be introduced where it is no longer possible to do without them, not where they can be adapted. Whenever measures for robotization are being planned, there should be a thorough analysis of how they affect the end result of operation, the quality of the product, labor productivity, and the number of workers employed in the particular section.

In 1985, our association's institute developed and turned over for application to the Tashkent "Geologorazvedka" Plant a method for comprehensive examination of a production operation with a view to application of robotic complexes and flexible production systems. It could also be of use to other enterprises in the republic. But if the plans outlined are to become reality, there needs to be a specialized intersector production association for the development, application, adjustment, and experimental operation of robotic equipment on a contract basis.

The entire set of problems related to development of the republic's machinebuilding complex can be solved effectively only if there is a scientific organization to provide coordination. That is why I consider it advisable to set up a scientific research institute for automation and control systems that would also cover experimental production. Its particular feature is that it could be created with the internal human and financial resources of the NPO "Kibernetika," as well as those from certain other institutes and associations, without calling upon the state for additional resources.

A fundamentally new approach to development of the plant and equipment of machinebuilding and introduction of new metal-working equipment and automatic control systems also require a corresponding training of personnel. It is no secret that the lack of qualified specialists in operation of sophisticated equipment is one of the reasons why its efficiency is not high enough. Last year, a training-scientific-production complex (UNPK) was created in the "Motor" Engineering Center; its task is to train specialists for automated production operations. The Tashkent Polytechnical Institute and the plant's specialists have participated in the most

direct way in organizing it. To be specific, here at the motor plant there is a branch of the department for automatic control. Students learn the fundamentals of their future profession right at the plant.

A further step in developing the UNPK "Motor" is to create within this complex a scientific training center (UNTs) that would be like a minishop or testing facility equipped with the most up-to-date automated equipment, making it possible to simulate manufacturing processes. We are planning to fit out the UNTs with several machine tools and robots, to introduce a system for industrial movement of materials within the shop that would be controlled by an on-board computer. The only serious obstacle to development of our UNPK is the lack of computers, which are simple to order and impossible to obtain under present conditions.

But a single educational-scientific-production complex does not solve the problem of personnel on the scale of the republic. There has to be a sharp increase in the number of graduates who are specialists with university-level qualifications in the technology of robotized production operation, and the training of workers to operate the sophisticated new equipment has to be organized centrally.

Thanks to the timely decree of the republic's council of ministers, this important and necessary job has now been placed on a unified state foundation.

In Uzbekistan, the course has been resolutely adopted toward technical reconstruction and retooling of enterprises. It has become obvious today that only through the broadest use of the most recent advances of scientific-technical progress will we be able to undertake true intensification of social production, guarantee a major rise in labor productivity, and thus realize the proposition of the 27th CPSU Congress of accelerating the country's socioeconomic development.

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## ROBOTICS

**Role, Future of Industrial Robots Examined**  
18230034 *EKONOMICHESKAYA GAZETA in Russian*  
No 9, Feb 89 p 17

[Article by P. Belyanin, corresponding member of the USSR Academy of Sciences, under "Where Opinions Meet" rubric: "Does the Robot Have a Future?"]

[Text] Moscow—Engineers and scientists have recently been arguing a lot about what means of automating production, especially in machine building, should be given preference. We are hearing more and more often: Is it not too extravagant to use industrial robots, processing centers and flexible production systems? And, in

general, is it necessary to make extensive use of electronics in production? That is, they are questioning the advisability of making broad use of computers, including personal computers.

It seems that to a considerable degree these disputes are fruitless. The practice of the highly developed industrial countries of the world has already answered these questions. And one must not fail to take into account practical experience (even if it is not one's own).

Also undisputed is the fact that assessments of new technology must be based on the economic expediency of its use. The resources of a labor collective may be spent only on equipment that can pay for itself in an acceptable time. But since disputes have arisen about what would seem to be an indisputable subject, this means that under some conditions the new progressive technology is not justified. What are they? And why?

Rotary and rotary-conveyor lines capable of making, let us say, 200 different plastic parts in a minute or of assembling about as many valves of aerosol containers in the same amount of time are the very best technical means to eliminate our shortage of goods. It is as if they are adapted to combat this shortage. And they guarantee a high economic efficiency of production. Unfortunately, the list of products that can be produced on such lines is still extremely limited. Here it is advantageous to produce small objects with a simple structure in large quantities. Rotary and rotary-conveyor lines are simply indispensable in the production of tablets, bolts and washers and in the packaging of small food products.

The main difficulties in contemporary machine building have to do with the manufacture precisely of complex and large (e.g. box-type) parts. It is because of them that the production cycle of many machines increases and commodity output is reduced, thereby creating the shortage. But rotary and rotary-conveyor lines cannot help here. You cannot use them to make or assemble a machine tool, airplane or press. Not today at any rate. Three-fourths of our output of all machines, instruments and equipment is still produced in small-scale and individual production.

The market situation also plays a large role. Under the conditions of a shortage, customers buy any output, even of the lowest quality. No one needs flexible production here. It is even contraindicated, for it requires substantial expenditures and highly skilled personnel.

It can be said that the ideology of the use of robots and flexible automation of production arose here and began to break through before there was a sufficiently large demand for such equipment.

It was not so in the developed capitalist countries: the United States, Japan, FRG, France and Italy. Their market is saturated and there are considerable difficulties with sales. It was under these conditions that marketing arose. Its main principles amount to the following: study the market and determine the demand for output and commodities; if there is no demand, cause it; satisfy the needs of the market profitably and quickly, outstripping the competition.

Thus, the flexible automation of production was a response to the challenge of the market and a reaction to marketing.

All of this, it would seem, suggests the following conclusion: since conditions are not yet ripe in our country for the utilization of up-to-date equipment, there is no use dealing with it and wasting effort, time and materials that are in short supply here. This is the approach of the authors who are publishing their articles in some newspapers and journals, including "Ekonomicheskaya Gazeta," availing themselves of the right to a "pluralism of opinions." We have in mind the article "What Priorities Are We Selecting?" published in volume No 2 of "Ekonomicheskaya Gazeta" for 1989.

It is impossible to agree with such an approach to the matter.

Yes, today we have practically no market call. But this does not mean that we should stop research, development and production of robots, machine tools with numerical program control, flexible production systems and personal computers. There is no call but there will be without fail. And it is necessary to prepare for it now. Otherwise our country will lag behind hopelessly in the level of machine building production and therefore in the level of produced output. It will become impossible for our machinery and goods to compete successfully in the world market.

And we have to "turn around" quickly. In the West, they are accelerating the production and application of industrial robots, flexible production systems and computer technology. And not just in the West. Japanese firms, for example, had introduced 65,000 industrial robots by the end of 1985, although they had to buy most of them abroad. They have now significantly increased their own production of robots and in 1990 their number will increase to 85,000.

Interest in this technology declined somewhat a year and half or 2 years ago. They are once again striving to make the broadest possible application of robots in many countries of the world. This is explained by the fact that robots, just as flexible production systems, personal computers, and machine tools with numerical program control, are constantly being improved and are becoming more reliable. But the main thing is that they are acquiring broad functional capabilities. They have begun to utilize new subassemblies and components in the

design of robots, which make it possible to increase dramatically the speed and precision of movements and to improve the dynamic characteristics of manipulators.

About 30 percent of the industrial robots built in Japan now have microprocessor control. And it will be 60 percent within 2 years. The intellectual capabilities of computers will become greater.

Approximately the same thing can be said about computer technology. Its output is growing rapidly abroad and it is developing steadily. In the United States, for example, there are now more than 30 million personal computers in operation. Here it is planned to produce a little more than 1 million of them during the years of this five-year plan.

The technical, programming and information means of the flexible automation of production are being improved rapidly. In it they are utilizing control from a network of personal computers, systems to identify patterns, automatic control of products, failure diagnostics and many other innovations. They make it possible to begin establishing integrated computerized automatic production systems, which are conditionally being called unpopulated, although in reality they are merely sparsely populated. Such production systems are the prototype of the machine building enterprises of the next century.

The arguments about the expediency of utilizing robots are also fruitless because essentially the resolution of this question no longer depends upon us. In many cases, we simply can no longer get along without robots. They can perform production operations under uncomfortable, hard-to-reach and even inaccessible conditions. At the international exhibition "Science-88" recently held in Moscow, for example, they showed a robot fireman developed by scientists and specialists at the Problems of Mechanics Institute of the USSR Academy of Sciences. It can move along a vertical wall and, if necessary, on a ceiling with rather heavy tools. If it is equipped with an oxyacetylene torch, it can quickly cut a hole in the steel wall of a tank with hot oil and help to insert a hose for fire-extinguishing foam.

Such a robot can also be equipped with a paint sprayer. It will successfully paint the walls of dwelling and production buildings and high barriers. No other can perform such work automatically.

Today's attitude toward robotics and flexible production systems is reminiscent of the situation at the beginning of the 1960's, when machine tools with numerical program control began to be introduced. At that time, no plant worker had anything good to say about these machine tools: they are complicated, unreliable and unproductive, and they cost a lot. In short, they were of no use to anyone and never would be. But today many production systems are simply impossible without these machine tools. The all-round machine tool operators, who were quite justifiably called "golden hands," retired

and the average skill level of workers declined, whereas processed parts became considerably more complex and all machines became noticeably more complex in design. How can one get along here without machine tools with numerical program control? For there are parts—gear-boxes housings or hydraulic units, for example—that are so complex that 300 to 400 standard hours are required in their manufacture on universal lathes. And in the process, one must not allow defects in any one of the 200 to 250 production operations. Do we have a lot of masters capable of handling such a task?

Here is an argument that is widely used in disputes. Industrial robots and flexible production systems, they say, pay for themselves in 200 or even 500 years. But this is simply ridiculous. Yes, at times new technology pays for itself slowly. But there are good reasons for this. It often breaks down, because many components and parts are poorly manufactured. At some enterprises, they cannot put the new equipment under full load: they lack semifinished goods, parts, tools or equipment. The low level of skills of personnel also has an effect. But the new means of production are not being created for unseemly exploitation. If such ways continue to be observed, then scientific-technical progress will be simply impossible.

And one must not fail to mention still another virtue of progressive technology. It frequently gives a side effect, but also an important one. The appearance of industrial robots produced renewed interest in the automation of

machines with the help of transfer arms—ordinary, long-known mechanical arms. They began to use them, for example, in machine tools with numerical program control for replacing instruments or stampings. But flexible production systems influenced the design of traditional standard-unit machine tools and lines. Previously they were made with inflexible control. Now they are designed as partially flexible to change the list of machined products at least within certain limits.

The obvious conclusion is that domestic machine building has no other ways to improve its production base and to raise its efficiency than to use electronics and complex automation, including with the help of rotary-conveyor lines. Designers, scientists and production workers must, of course, do everything possible to lower the production cost and price of new robot technology, flexible production systems and other automatic equipment, to raise their functional capabilities and productivity, and to improve the operating specifications. Otherwise the way to new highly efficient machines in industrial practice will be closed for a long time and there is no way that this can be permitted. For our common goal is to establish highly efficient production. And only complex automated, flexible production that can turn out frequently interchangeable output of the highest quality can do this. The strategy for the development of our society worked out by the 27th CPSU Congress and 19th All-Union CPSU Conference demand this.

## CIVIL AVIATION

### Press Conference Reviews Aeroflot Performance, Future Plans

#### PRAVDA Report

18290094 Moscow PRAVDA in Russian 9 Feb 89 p 6

[Article by V. Chebakov: "Aeroflot: Problems Remain"]

[Text] Our civil aviation is 66 years old today. However, the traditional holiday will now be observed in August—on the country's Air Fleet Day. What are last year's results for Aeroflot? What are the prospects of one of the world's biggest aviation companies? This was discussed yesterday at a meeting of Soviet and foreign journalists with heads of the USSR Ministry of Civil Aviation.

First deputy minister B. Panyukov said that the ministry was on cost accounting for 1 year. There were shifts toward an improvement in work. However, the head of the Ministry of Civil Aviation did not begin to hide shortcomings either. Last year about 13 million potential passengers could not use airplanes. This, despite the fact that more than 124 million people were transported. The number of flight accidents and complaints by passengers decreased negligibly.

More facts. Flight regularity was maintained only 85 percent. Consequently, about 20 million people could not fly on time. There is a shortage of ticket sales agencies and there are more claims against airport service personnel, who are rude and inattentive to passengers.

Aeroflot managers told journalists that only residents of Kamchatka, Magadan, Yuzhno-Sakhalinsk, Yakutia, Tyumen, Norilsk, and Vorkuta would be able to feel an improvement in air transportation this year. As during previous years, the use of IL-86, IL-62, and TU-154 will be held back by limited engine repair capabilities.

In 1990 aviators expect efficient, new vehicles—IL-96-300, TU-204, and L-610. The construction of new air terminal complexes will begin in many of the country's regions. This includes the outskirts of Moscow, where a site for the new Moskva-5 Airport is being sought. Cooperation with a number of countries in the following problems is expanding: with Canada—airport maintenance; with France—construction of airport installations; with Sweden—combating of icing; with the United States—air traffic control. A total of 33 new air routes are to be opened in the country in 1989.

"Is the establishment of another competitive aviation company in the USSR possible?" journalists asked B. Panyukov.

The answer was quite lengthy. He said that it was possible to organize healthy competition among presently existing regional administrations of the Ministry of

Civil Aviation. However, I would like to ask the head of the Ministry of Civil Aviation: Is this realistic when all administrations are subordinate to one ministry?

It is obvious that a good operation of our air lines depends not only on Aeroflot. The Ministry of the Aviation Industry, Gosplan, Gossnab, and other departments should help civil aviation.

#### IZVESTIYA Report

18290094 Moscow IZVESTIYA in Russian  
9 Feb 89 p 1

[Article by V. Belikov: "Aeroflot-89"; first paragraph is IZVESTIYA introduction]

[Text] Managers of Aeroflot's leading services and subdivisions discussed the begun air navigation at a press conference held in February.

There were two main results of air transport operation last year: More than 124 million passengers were transported—5 million more than in 1987. The transfer of the entire sector to full cost accounting made it possible to obtain more than 400 million rubles of profit in excess of the plan. "The financial result," it was noted at the meeting with journalists, "exceeded all our expectations." The further development of new economic relations in civil aviation continues. A number of enterprises will be transferred to the second cost-accounting model and some, at the wish of the labor collective, can be transferred to the leasing contract. Furthermore, a joint-stock commercial bank—Aeroflot—was established in the sector.

What awaits air travelers on air routes and on land? The aviation fuel allocated for a year—15.02 million tons—corresponds to the amount determined by the five-year plan. The entire additional increase in the fuel limit is assigned for the development of transportation to the health-resort zone of the Black Sea and to the regions of Siberia, the Far East, and the Far North.

The practice of collecting preliminary orders for tickets from residents of remote regions, which has proved its value, is to be expanded. In addition to Chukotka, Kamchatka, and Magadan Oblast, this will now be done in Sakhalin, Norilsk, Nizhne-vartovks, Nadym, and Mirnyy (Yakut ASSR). Unfortunately, it is still impossible to fully meet the demand for air transportation.

The most efficient liners—IL-86, TU-154M, and Yak-42—will appear on another 25 air routes. Their share in the total volume of air passenger transportation will make up 19 percent.

As noted at the press conference, big hopes are pinned on the appearance of new airships in the 1990's. Only after the introduction of the Il-96 long-distance airbus for 300 seats will it be possible to remove peak loads from the



main lines connecting the country's European part with eastern regions and to meet the demand for airplane tickets on transcontinental international routes.

Flights between our country and Australia will be carried out for the first time. Negotiations on cooperation between Aeroflot and the South Korean Aviation Company will continue. Great Britain's second aviation company, Virgin Atlantic, will begin flights on the trans-Siberian route of Western Europe-Japan on 1 April. From the middle of the summer our Il-76 winged cargo van will begin to fly on the Moscow-Tokyo route and back. Soviet air controllers, who control traffic on international routes passing over our country, will begin to undergo practical training in Great Britain as of this year.

The following answer was given to the question by an IZVESTIYA correspondent concerning the use of the Buran spaceship automatic landing system in Aeroflot: "We have successfully completed the tests of the new microwave landing system operating like the one designed for Buran in the centimeter wave band. Plans are made to install it in the country's 10 biggest airports before 1995. A simultaneous use of existing and new landing systems is envisaged during the transitional period."

#### **Failure to Commission Automated Air Traffic Control System Cited**

18290097 Moscow SOTSIALISTICHESKAYA  
INDUSTRIYA in Russian 15 Feb 89 p 2

[Article by Ye. Reshetnyakov, chief expert, Main Air Traffic Control Administration, Ministry of Civil Aviation, in the article: "Point of View": "The Earth Answers for the Sky"]

[Text] The development of air transportation in our country has progressed primarily by way of improving the fixed-wing and helicopter fleet, with lesser importance attached to the electronic basis of air traffic control. That is a fact. That is why we have "arrived" at a point where the entire territory of the enormous country is served by only about ten Start automated ATC (air traffic control) systems, only one Trassa system, in Simferopol, and the Spektr system, which has been operating on a trial basis.

That is all! The Strela, the largest domestic rayon automated system, which was conceived as equal to foreign analogs, has been undergoing operational testing for a good number of years in the North Caucasus Civil Aviation Administration, with no end in sight. The construction and installation work associated with setting up this system in the Ukraine is uninspired. From the looks of things, there will be a further delay of up to several years before it becomes operational. So it happens that modern radar, which provides the controller's screen with the most important element—the airliner's calling card (the assigned and present altitudes)—is in

service in only 15 percent of ATC centers. Analysis of aviation accidents shows that insufficiency of new technical means has been the most serious problem for some time.

Consider the following. At a location where the Ukrainian rayon automated ATC system should be operating, there are several hundred different aircraft in the air at the same time, all travelling at enormous speeds on collision courses and on intersecting courses, in horizontal flight and with variable flight profiles. The sky does not become quiet even for a second, and the people who direct this insane air traffic have only reliable radio communications at their disposal, while on the radar screen (in most cases) they see only a barely visible dot of light the size of a match head representing a modern IL-86 liner carrying 350 passengers.

Every year controllers apply their highly-developed skills to prevent hundreds of accidents from occurring in the skies over the Ukraine. The causes could include equipment failure or a simple error on the part of some person.

Every Soviet person still remembers the news reports coming out of Chernobyl. Then we had Novorossiysk Bay, Yaroslavl, Arzamas, Sverdlovsk, Nizhne-Vartovsk, Surgut, Irkutsk...

The feeling of shame, insult, and anger is growing. How long will we continue to suffer disasters caused by two or three sluggards who are careless in carrying out their duties or who fail to make a responsible decision that results in loss of lives?

The above question only seems to be rhetorical. It can and should be answered.

The clock read 13:52 on 9 September 1976. Thousands of persons vacationing near the town of Anapa witnessed how, in an absolutely clear sky, a Yak-40 and an AN-24 collided at an altitude of 5,700 meters, killing 62 persons. Would this have happened if the North Caucasus Automated ATC Center's Strela were operating? I am sure it would not.

It was 13:38 on 8 October 1979. In the vicinity of the Dneprodzerzhinsk airport, 179 people died at an altitude of 8,400 meters. The commission carrying out the investigation established that 204 information exchanges had taken place between the crews in 23 minutes as they flew on their collision courses in the zone monitored by a single controller. (Two-thirds of the exchanges could have been replaced by the radar display of an automated ATC system if one were present.) Imagine yourself in the shoes of the controller, who was guiding the flights of several dozen aircraft at the same time. Provided with only a simple radar for him to watch (with the screen showing dozens of dots and noise caused by atmospheric phenomena and terrain features), even a man possessing

a specialized education and a good amount of experience would be liable to commit errors. However, a controller has no right to commit an error, since the cost is tragically high.

The above controller bore severe punishment, of course. Another family suffered. If the Ukrainian ATC Center's planned Strela were operating, would this terrible tragedy have occurred? I am certain it would not.

It was the 3rd of May, 1985. Flying at an altitude of 2,400 meters on a head-on course in the vicinity of the Lvov airport, a TU-134 travelling the Leningrad-Lvov route collided with an official AN-26.

People perish. In peacetime. In a peacetime sky. Meanwhile, construction of the Strela system for the Ukrainian ATC Center, with the Yugoaptransstroy trust as the general contractor, drags on from year to year as a "non-priority project." Who came up with a term like that! Here and there, every year and every month, there are aviation incidents.

I am convinced that we will continue to suffer such occurrences until we do something about the accursed irresponsibility and devil-may-care attitude! With regard to our own work and that done by others. Every time we do poor quality work, forget something, fail to take something into account, leave out some details ("We'll get by somehow!"), refuse to recognize our own negligence ("That's good enough"), or do not accomplish the set plan, or, on the other hand, hurry to hand in a job in an unfinished form to "beat the deadline" or "be sure to hand it in on time," we are personally guilty of causing tomorrow's accidents and disasters.

We could merely say, "So what?" to the Rostov aviation enterprise's endless refurbishing of the ventilation, air conditioning, and power equipment of the same Strela that is undergoing operational testing at Rostov-on-Don. We could say that all this renewal is being carried out to create a system that really is second to none as far as Western analogs are concerned. But that just is not so!

The major cause of delay in commissioning the system is the fact that in the planning stage the lead design organization of the Minradioprom set the cost of the system's support equipment (ventilation, air conditioning, power) at 10 percent of the cost of the entire project. Foreign practice sets outlays for this equipment at 40 percent of total cost. How much difference is there? This penny-wise and pound-foolish economy turns out to cause millions in losses, to say nothing of losses related to flight safety.

The Rostov-on-Don Strela was slated for operation in 1983. The constant stream of loose ends convinces us that it will not be ready for another year. Meanwhile, the Ministry of Civil Aviation budgets 16 million rubles a year for operational expenses of the still non-functioning

Strela. Only now does the question arise: Should operational testing be continued? The results are deteriorating, and the life of the equipment is nearing its end!

It is time to demand that the managers of the lead organization involved with system development cease immediately their procrastination, which has already produced a parade of victims. I believe that the workers in the North Caucasus Center's Strela will agree. How do you think they like it - being forced to undergo training a third time in the ATC training center and "train" for years to operate a non-functioning system?

There is no doubt that all of us—from the operator and controller to the deputy minister for flight operations and air traffic control—are united in believing that the system should be functioning now to assure flight safety! There just is no other way. However, if we are less than competent to do this (the results of attempting to complete the system in the last few years convince us that this is the case), we must look for alternate solutions to the problem. If we have bitten off more than we can chew, perhaps we can dispense with some functions for the time being—after exhaustive and qualified analysis, of course—and utilize only that which can be utilized, naturally continuing plans to bring the system up to the necessary state.

Our earthly sins are exacting heavy penalties from our people in the skies.

**Roundtable Examines ATC Controllers' Plight**  
*18290111 Moscow VOZDUSHNYY TRANSPORT*  
*in Russian 16 Feb 89 pp 2-3*

[Roundtable on air traffic controllers' problems conducted by Yu. Ostapenko and V. Trubitsin of the VOZDUSHNYY TRANSPORT editorial staff with participants A. Platonov, controller at the MTs AUVD [Moscow Center for Civil Aviation Air Traffic Control Automation]; V. Shelkovnikov, chief of the GlavUVD MGA [Air Traffic Control Main Administration, USSR Ministry of Civil Aviation]; A. Kholmtsev, head of a department of the Aviation Workers Trade Union Central Committee; A. Skripnikov, simulator instructor and former pilot at Kolpashevo; A. Fadeichev, from Ulyanovsk; L. Puzanov, controller from Borispol; A. Dolganovskiy, chief of a department of the GlavUVD MGA; G. Semenov, controller from Surgut; Yu. Grigoriadi from Lvov; and V. Ognev: "Who Is Controlling the Flight and Who Is Controlling the Controller?"; first two paragraphs are editorial staff introduction]

[Text] "The controller problem" has been actively debated in recent months in aviation detachments, in offices of the ministry, and in every one of the ATC services, and it is natural that it could not help but be discussed in our newspaper. A number of articles have aroused a ready response among controllers, several groups of specialists have visited the editorial staff at different times, and

journalists have gone out to the aviation workers and discussed the matter in the ministry and the central committee of the Aviation Workers Trade Union.

As a result of these meetings, viewpoints were brought to light, problems were revealed, and this editorial staff "round table" is making its appearance. We will be introducing the participants during the course of the discussion. Thus, the representative of the Moscow Center for AUVD, a collective where the controllers' problems are acute, will speak first.

A. Platonov: There really is a lot of discussion about our collective now. I would like to clarify the situation. We believe that the traffic service is not occupying the place that befits it in our sector. The fact that a controller, who is responsible for the safety of dozens of aircraft under his control, receives less than any member of a crew confirms my statement.

"VT"[VOZDUSHNYY TRANSPORT]: And you made up your mind to take such an unusual step as nonreceipt of wages to attract attention to your needs? I would like us to analyze this situation.

V. Shelkovnikov: What the controllers are talking about now is not news to me and it is not news to the ministry managers. The role of the ATC service in civil aviation really has grown immeasurably, but the steps being taken to improve the working conditions, salary, and prestige of the controller's profession are obviously inadequate. Though I want to say that the program to help the ATC service is very interesting, and if it is carried out, we will be able to increase the role of those in the traffic service significantly.

And at the same time, I cannot understand and justify those methods of "force" pressure being undertaken by the controllers. After all, the managers of the GlavUVD, the ministry, and the Political Administration have repeatedly met with employees of the MTs AUVD; they have interpreted the ministry's position and explained that time is needed to implement the measures to assist the collective. Minister of Civil Aviation A. N. Volkov received a group of controllers recently as well.

A. Kholmtsev: The controllers' sometimes uncompromising position and their critical assessment of the state of affairs in many respects stem from the fact that many priority social problems in the sector have not been resolved for a long period of time.

As the result of the many years that the residual principle has been in effect in developing the sector's social area, the degree to which aviation workers are provided with housing is one of the lowest in the country and many enterprises do not have the necessary ground facilities and sanitary and general accommodations—that is one aspect. On the other hand, the sector has highly skilled

specialists and there are extensive contacts with airlines from many countries. For this reason, whether people like it or not, they have to compare the working conditions and wages in them.

For this reason, in regarding the demands by controller personnel at the Moscow Center with understanding, the trade union's central committee has welcomed the steps to look for funds to increase wages undertaken by the management of the Ministry of Civil Aviation.

As the result of intensive mutual contacts between controllers and the center's management, the decision was made to detach the MTs AUVD from the Vnukovo Production Association as of 1 January 1989 and to grant it the status of a state enterprise and shift it to full cost accounting and self-financing.

Now the Moscow Center will be able to organize a fund of 500,000 rubles to develop production, science and technology, a social development fund of 350,000 rubles, and an economic incentive fund of 750,000 rubles. And if we take into account that the USSR Goskomtrud [State Committee for Labor and Social Problems] and the AUCCTU (at the suggestion of the Ministry of Civil Aviation and the trade union's central committee) approved a decree on 17 January authorizing controllers to be given a bonus for intensive work amounting to 12 percent of their salary, the wage increase will be substantial, in our opinion.

A. Skripnikov: We cannot help but be pleased by this attention. It is important that it is followed by specific results. I myself have worked in Aeroflot for a long time, and my son is a controller. I have advised him time and again: while you are young, while your health has not been affected—change your vocation. Judge for yourselves. A controller's salary is less than any member of an aircraft crew. The same applies to vacations. Each flight detachment has a physician, but there are none for air traffic control. A well-known decree on pension provisions for civil aviation workers states that ATC employees may be legally pensioned at age 55. But what percentage of controllers will be able to work until that age with the overworked nerves they now experience? Well, all right, you have worked 15 years at a radar scope; where will you work the 10 that remain?

A. Fadeichev: A principle of socialism reads: "To each according to his labor." But who has evaluated the controller's work, and in accordance with what principles? Who in our country has calculated or even made an attempt to calculate the profit brought in by the air traffic control service?

L. Puzanov: But why do we have to discover America all over again? After all, ICAO [International Civil Aviation Organization] has all the studies and recommendations which concern our profession. And by the way, the

"capitalists" we are learning a great deal from now do not consider it unprofitable to pay their controllers 10 times as much as we pay ours.

A. Dolganovskiy: The traffic services will have to be shifted to the new salaries in conformity with Decree No 1115 of 17 September 1986 after accumulation of the calculated wage fund necessary for introduction of the new wage conditions for controllers.

However, we cannot forget that the basic source for generating the funds for the traffic services today is the cutback in the number of workers employed.

But we cannot permit the work of ATC organs to be developed solely on the basis of enterprises' commercial interests. After all, the number of aircraft departures may vary widely at airports of the same category that handle roughly the same volume of passenger traffic.

So the airports at Nizhnevartovsk, Murmansk and Saratov had about 680,000 passenger departures in 1984, while the aircraft departures totaled 11,515, 7,743, and 23,966, respectively, for the year.

A similar picture is taking shape with aircraft flights through rayon ATC centers. For example, the controllers at the Penza Rayon Center are paid the wage for a Category III airport, but the work they perform is similar to that performed by controllers at the Moscow Automated Rayon ATC Center for the Penza direction. They control air traffic in English involving aircraft of foreign airlines such as the Boeing 747, and so forth.

All this attests to violation of the socialist principle of payment according to labor and violation of social justice.

As long ago as 1973, the International Civil Aviation Organization developed a unified concept recommending universal introduction of air navigation fees. Fees need to be introduced for all our ministries and departments.

G. Semenov: And the currency to be paid to the GlavUVD, not the International Air Services Central Administration.

L. Puzanov: And the millions of rubles spent on the semiautomated, obsolete Rostov AS UVD [automated ATC system], the "Strela!" And the millions which have been spent, are being spent, and will be spent on the "Strela" in Kiev, which has still not been put into use and which is also obsolete! Why didn't they consult us, the controllers, when they authorized flights east by Finnish and Czechoslovak airlines' aircraft? We probably would have been able to advise more efficient routes.

G. Semenov: The best solution is to organize a state system for airspace use and controlling air traffic.

L. Puzanov: Yes, exactly that. We need a state system which bases its activity not on the rates of revenue for takeoffs and landings and not on adjusted aircraft units, but on a real economic foundation.

Yu. Grigoriadi: The magic word combination "the interests of defense capability" has become an argument in many incidents involving military controllers. The entire course of the ATC service's development and its existence has made it necessary to turn it into a state service. By collecting payment for the expensive services of controllers, a state service will be able to resolve many problems, such as differentiated compensation for skill; a state service will be able to unify ATC regulatory documents and make a psychological and vocational selection of controller personnel in alliance with the doctors. A state system will be able to resolve the housing problems and acquire the necessary equipment with its own funds...

V. Shelkovnikov: I think every controller knows that the directive organs have made the decision, in accordance with our long-standing suggestion, to establish a unified state ATC service. It will be introduced in stages. We need to try only to ensure that the fate of this document is not like that of many useful decisions. We must see that it works. And the structure can be also be improved in the process of its operation.

"VT": At this point, it is quite appropriate to speak about glasnost and keeping people informed. Many persons know nothing at all about what is being done in the ministry to resolve their problems and do not know the details of the fund formation mechanism. Just rumors. Just resentment: we are being paid little and we are given little attention.

A. Kholmtsev: All the command personnel and managers of public organizations must be reproached here. What don't they have in collectives—"triangles," "squares," STK's [presumably: technical sports groups], and so forth—but there is no real work with individuals. How easy it was before: put a report together, vote for the next candidate for a position, and that was all. But it turned out that going to the people in the shops and services and on the shifts was not very pleasant.

Now, obviously, a great deal depends on the labor collective itself and its management and trade union committee.

A. Platonov: Not only the trade union activists, but supervisors as well, seldom come to the shifts. And even the zampolit [deputy commander for political affairs], whose sacred responsibility it is to be among the people, especially when a complicated situation has developed, does not come to us. They provide even less help in resolving a number of social and moral questions.

"VT": We have been convinced of this by talking with controllers from the Moscow Center for ATC Automation. Here they have "their own" zampolit, so to speak, not one that is detached, but as they told us, they see him only on holidays when the flags must be flown, and in the presidium at ceremonial assemblies.

V. Shelkovnikov: It is time to do away with this style because it is contrary to the spirit of restructuring. Moreover, it should be added that those who think that different penalties produce the most gain are mistaken. No, that is not so. The stronger the administrative pressure, the lower the level of discipline and the more poorly the human factor works.

V. Ognev: That's it! "The human factor." Perhaps we have been speaking about and concerned about factors enough. We must be concerned about people.

A. Platonov: Let us not proclaim, but confirm by deeds, that the person is a nation's most important resource. Look at our neighbors: priority attention to the individual has made Japan one of the most developed states in the world. Foreign companies put honesty, ethics, respect, and personality in first place among the most important precepts of management personnel.

V. Shelkovnikov: Fine words. And I want to believe they will be followed by deeds. What can I say specifically about this? I will touch upon the development and implementation of the new requirements of the VLEK [presumably: aviation medical commission to evaluate controller fitness] for controllers. The Ministry of Civil Aviation has adopted a decision to revise the regulations on medical examination. They will provide for further improvement of the VLEK's work and reduce controllers' dependence on the VLEK physicians. Suggestions from the traffic service's specialists will also be taken into account as much as possible.

A. Dolganovskiy: I think that an insurance fund for benefits to controllers who have been temporarily removed from air traffic control by the VLEK will play a certain role in humanizing our relationships. Preliminary discussion in the services will be required here, of course. If the overwhelming majority of controllers come out in favor of this fund, the next stage will be to prepare a regulation on the legal status of the fund.

A reduced work week and provision of additional vacations for ATC employees. Model five-shift work schedules have been worked out for airports in the first and second categories which provide for the best possible duration of work in a month for a controller engaged directly in controlling air traffic.

Pension provisions, taking the VLEK requirements into account. This matter is being worked out. Proposals on this have been sent to the Goskomtrud.

"VT": In analyzing the situation, we can say that controllers have revealed one of the vitally important nerves which require "treatment" today. The sector's management is taking steps. But as all the persons we have spoken with and all those who have written us unanimously point out, we cannot allow steps taken in the first stage to remain half-measures.

V. Shelkovnikov: This is how or approximately how the question was raised when the controllers met with Minister of Civil Aviation A. N. Volkov. I want to stress that the discussion was very confidential and constructive in nature, and all matters were discussed with concern and understanding of the problem's importance. I am convinced that in many respects the meeting will also predetermine the ministry's social policy with respect to the ATC service.

"VT": Thank you. We thank everyone who took part in our correspondence "round table," and we wish to say that, having begun a series of articles this year on controllers' needs, we will be returning to this subject time and again, and we will speak about how the problems of the ATC service are actually being resolved.

#### **Flight Personnel Association Publishes Draft Charter**

*18290126 Moscow VOZDUSHNYY TRANSPORT  
in Russian 7 Feb 89 p 2*

[Draft Charter of the Association of Civil Aviation Cockpit Personnel: "There Will Be an Association!"]

[Text] A joint meeting of the MGA [Ministry of Civil Aviation] collegium and the presidium of the Aviation Workers Trade Union Central Committee held on 3 February examined the question of establishing an association of civil aviation cockpit personnel.

The establishment of this public organization has been discussed for a long time among pilots, flight engineers, and flight attendants, and suggestions on it were made at the initiative of a group of Aeroflot veterans. The ministry and the Aviation Workers Trade Union Central Committee supported the initiative. The ministry collegium and the presidium of the trade union's central committee decided that it is necessary to concur with the proposal by the MGA's Flight Service Main Administration and the Public Department of the Aviation Workers Trade Union Central Committee to establish an association of civil aviation cockpit personnel.

The functions of the founders are entrusted to the Ministry of Civil Aviation and the Aviation Workers Trade Union Central Committee. The MGA's Flight Service Main Administration and the Public Department of the trade union's central committee have been charged with organizing the preparation and conduct of the constitutive conference of the association with preliminary discussion of this matter in all the sector's flight subunits. During this time the MGA Legal Department



and the Public Department of the Aviation Workers Trade Union Central Committee will work out the juridical and legislative aspects in establishing the association and the documents regulating its work.

The MGA working group on public organizations and informal groups suggested that the draft of the Charter published below (prepared by Pilot First Class A. Malinovskiy, a member of the initiative group of cockpit personnel) be discussed before 20 February and presented to the Aviation Workers Trade Union Central Committee for remarks and suggestions on its content. That lists of delegates to the constitutive conference be elected from active cockpit personnel (two persons from each flight detachment) and one representative of cockpit personnel veterans (a pensioner) from the administration (association) and sent to the Aviation Workers Trade Union Central Committee before 20 February.

It is proposed that discussion of the Charter and the nomination of delegates be conducted at general meetings of flight detachments (a quorum is obligatory). Minutes of the meetings are to be sent to the Aviation Workers Trade Union Central Committee together with the suggestions for the draft Charter and the lists of delegates before 20 February.

#### **Charter of the USSR Association of Civil Aviation Cockpit Personnel (Draft)**

##### **I. General Provisions, Objectives and Tasks**

1. The association is a voluntary, independent social and professional organization which unites active and former specialists in the flying profession.
2. Its activity is based on the initiative and creativity of its members, proceeding from the principle that "everything that has not been prohibited has been authorized" and which does not run counter to the Constitution of the USSR and legislation of the USSR, the Charter for professional unions of the USSR and aviation workers, within the framework of which it is established.
3. The association sets these basic objectives for itself:
  - to increase flight safety;
  - to protect the social and professional interests of civil aviation pilots;
  - to increase the prestige of the flying profession in civil aviation and in society.
4. Its basic tasks are:
  - analysis and development of proposals and drafts of decisions and measures and their subsequent presentation to the Aviation Workers Trade Union Central

Committee, the MGA, and other sectorial and state organs for coordination and implementation on these matters:

- analysis of flying practice and technology and the documents regulating flying work;
- working and living conditions and their conformity with the tasks of increasing flight safety and preserving the health and prolonging the professional service and lives of cockpit personnel; social and legal protection of cockpit personnel;
- the interaction between the flight service and crews and the ground services and its legal substantiation; cooperation and exchange of experience with associations of pilots in foreign airlines within the framework of IFALPA [presumably: International Federation of Airline Pilots Associations];
- protection of the pilot's personality, his civic and professional dignity and rights from administrative and bureaucratic voluntarism and arbitrariness; establishment of an atmosphere of sincerity, frankness and trust in the flying environment, high inner discipline and a sense of personal responsibility, civic and professional worth, high professionalism and standards; and the development of draft decisions and measures to be presented subsequently to the Aviation Workers Trade Union Central Committee, the MGA, and other organs for coordination, implementation, and monitoring of their execution.

The association performs the tasks that have been set on the basis of glasnost and democracy and broad involvement in discussion of pressing matters affecting cockpit personnel in cooperation with the associations of Soviet sociologists and jurists, IFALPA, the NII GA [State Civil Aviation Scientific Research Institute, the Civil Aviation Academy, the Aviation Workers Trade Union Central Committee, the MGA, and other organizations.

##### **II. Members of the Association and Their Duties and Rights**

5. Citizens of the USSR who are certificated as flight specialists in civil aviation in the USSR, as well as former flight specialists with no less than 10 years' flying service who are aware of the objectives and tasks of the association and who pay their membership dues may be members of the association.
6. All members of the association, regardless of their length of service and place of work, their official position and elected post, enjoy equal rights:
  - to elect and be elected to supervisory organs;

- to nominate any candidates from among the membership of the organization, including one's own candidacy, for any of the elective organs;
- to the protection of their social and professional rights;
- to receive moral, material, and legal assistance.

7. Association membership is accepted in territorial production departments.

8. The amounts of membership fees and the procedure and frequency of their payment are established by the conference.

9. Membership in the association is discontinued as the result of:

- a) a written or oral statement by a member; or
- b) a decision by a department of the association made in connection with violation of the Charter or systematic failure to pay membership dues, as well as in connection with grave detriment to the organization's authority.

### III. Central Authorities

10. The association's central organs are:

- a) the conference; b) the board; c) the presidium of the board (for current work); and d) the auditing commission.

11. The conference is the highest authority. It is convened by the board at least once annually.

Representatives of departments—delegates elected in working meetings—take part in the conference and have the deciding vote. The standard for representation and the procedure for electing delegates are determined by the conference. The conference accepts the Charter and adds amendments to it, and it approves the board's work plans and the budget. It hears and confirms the reports of the board and the auditing commission; it elects members of the board, the auditing commission, and other elective organs.

Decisions of the conference are adopted by a simple majority vote in the presence of no less than half the delegates with a decisive vote that have been elected to it. Voting is secret on personal matters, but open (at the discretion of the conference) on other matters.

The board convenes a special conference at the request of no less than one-third of the departments or on its own initiative.

12. The board of the association is established by the conference from the delegates of production and territorial departments with a deciding vote.

The board is elected for a period of (?) years. Board members may be reelected, but not for more than two consecutive terms. The number of persons on the board is determined by the conference. The president is elected by the board. At the president's request, the board confirms his deputies from among the board's members.

The board drafts the plans for its work and the association budget, submits them to the conference for approval, and reports to the conference on their implementation.

The board coordinates the work of the departments and supervises the expenditure of budget funds in the central account, and convenes the regular and special conferences. In the event that the activity of a department is not in conformity with the Charter, the board has the right to suspend the department's membership in the association until a final decision by the conference.

A meeting of the board is held at least once in 6 months. Decisions of the board are approved by a simple majority vote and are competent when no less than half the board members are present.

13. The president of the association and the presidium regularly report at meetings of the board.

14. The auditing commission acts on the basis of the provision on the auditing commission adopted by the conference. The chairman of the auditing commission takes part in the work of the board with a deliberative vote.

The authorities of the association and its departments are elected members of the organization from the active and former flight specialists in a ratio corresponding to the correlation of active and former flight specialists. Employees who hold positions ranging from an ordinary specialist to the commander of a flight detachment, inclusively, are among the active specialists elected.

### IV. Financial Assets

15. Financial assets are formed from:

- a) admission and membership fees;
- b) voluntary donations, gifts, and other payments from citizens, institutions, enterprises, cooperatives, and state and public organizations in the USSR and abroad;
- c) receipts from cooperative activity organized on the basis of association funds and under contracts.

16. It has a central account in the USSR Gosbank. Funds from admission and membership fees received by departments of the association are in the amount determined by the conference's decision.

17. The association and its departments are relieved of the payment of taxes, state tariffs, customs and other duties paid to the USSR State Budget.

**V. Legal Status and Attributes of the ALS GA  
[Association of Civil Aviation Cockpit Personnel]**

18. The association is a juridical person.

19. The board has a stamp and seal of established design with its name, emblem, badges, and the honorary symbol for awarding a decoration.

20. The association may be disbanded by a decision of the conference.

21. Membership dues are being established.

The draft of the Charter which is being proposed must be discussed in workers meetings of flight collectives. Please send suggestions by any rapid means of communication to the MGA under the label "Association."

The period for reviewing suggestions is until 20 February this year.

**Air Traffic Controllers Association Draft Charter  
Published**

18290110a Moscow VOZDUSHNYY TRANSPORT in  
Russian 9 Feb 89 p 2

[Draft of charter for the All-Union Association of Air Traffic Controllers: "An Association Is Born"; first two and final two italicized paragraphs are editorial staff remarks]

[Text] *In November, controllers in the Moscow air traffic hub met at Vnukovo and advanced the idea of establishing a public organization for the traffic service. Four commissions were formed at that meeting.*

*And the term of the All-Union Constituent Conference for the establishment of the All-Union Association of Air Traffic Controllers was set for the end of February 1989 and a draft of its charter was written. It is being published in the newspaper.*

**Charter of the All-Union Association of Air Traffic  
Controllers (Draft)**

**I. Overall Provisions, Objectives and Tasks**

1. The All-Union Association of Air Traffic Controllers (VAAD), an independent, nonparty public organization which was established in conformity with Article 51 of the Constitution of the USSR, unites controllers in the traffic service of civil aviation subunits on a voluntary basis and operates in conformity with the Constitution of the USSR and Soviet laws.

2. The activity of the VAAD is based on persuasion of the masses, development of their active involvement, initiative and independence, and broad glasnost, criticism and self-criticism, especially criticism from below, the strict principle of democratic centralism and the collectivity of management.

3. As an organization uniting citizens of the USSR on a professional basis, the VAAD considers implementation of the following tasks to be its objective:

—promoting flight safety in every possible way;

—increasing the skill and professional level of air traffic controllers;

—resolving urgent social problems;

—meeting the spiritual and intellectual demands and interests of VAAD members.

4. The All-Union Association of Air Traffic Controllers expresses the interests of controllers in the civil aviation traffic service, upholds their rights, and interacts with the administration and trade union and other organizations in resolving problems by means of public control, as well as through the people's deputies—members of the Association—by means of a deputy's inquiry.

**II. Members of the VAAD and Their Responsibilities  
and Rights**

5. Any citizen of the USSR who has the certificate prescribed for a controller in the civil aviation traffic service, who is working in one of the civil aviation traffic service subunits, and who pays his membership dues regularly may be a member of the VAAD.

6. A VAAD member is obliged to promote increased flight safety in every way possible and to actively assist in carrying out the Association's decisions.

7. All members of the VAAD possess equal rights, regardless of their length of service, official position, and elected post held in the VAAD.

A VAAD member has the right:

—to elect and be elected to the Association's directive organs;

—to advance the candidacy of any VAAD member, including his own candidacy, for any elective organs in the Association;

—to freely discuss and openly express his viewpoint on all matters examined by the Association;

—to criticize the actions of any VAAD members and elected organs of the Association;

—to have their professional and social rights defended by the Association; and

—to receive moral, material and legal assistance from the Association.

8. Members of the VAAD may be elected to the Association's directive organs from among controller personnel, including flight operations officers. Other categories of officials in the traffic service may become part of elected organs of the VAAD with the rights of consultants and experts.

9. In the event that a VAAD member is discharged for health reasons or is pensioned at his personal request, he may remain in the Association with the rights of an honorary member.

10. An honorary member of the VAAD pays membership dues set at 70 percent of the established norm and possesses all rights of an active VAAD member, except the right to elect and be elected to the directive organs of the Association.

### III. Organizational Structure of the All-Union Association of Air Traffic Controllers

11. Democratic centralism is the guiding principle of the VAAD. Any elective work in the VAAD is performed voluntarily. In cases where elective work entails the expenditure of material resources, compensation is provided from the organization's budget.

12. The VAAD includes territorial divisions, formed in accordance with their UGA [administration of civil aviation]. The major air traffic hubs may form their own territorial divisions. All territorial divisions are autonomous in resolving local problems and they have their own charters, based on the All-Union Charter, and their own budgets.

13. The VAAD's highest organ is the All-Union Conference of the VAAD, which convenes once every 2 years. In the period between the All-Union conferences, management of all VAAD activity is exercised by the Council of Chairmen. The Council of Chairmen convenes twice annually (when necessary, the Council may convene even more frequently at the request of one of the cochairmen).

14. Working commissions, which include territorial commissions, are formed to carry out the day-to-day work. Each member of the Council heads one of the commissions. Working groups to study specific problems may be formed within the commissions.

15. An auditing commission is elected by the conference to control the use of VAAD funds.

### IV. Leading Organs of the VAAD

#### 16. The All-Union Conference of the VAAD:

—hears and approves the report of the auditing commission;

—reviews, amends and approves the VAAD Charter;

—determines the number of personnel and holds elections to the Council of Chairmen from candidates elected in territorial conferences;

—sets the terms for the next All-Union Conference;

—elects the auditing commission; determines the VAAD budget;

—reviews other matters related to the competence of the VAAD and entered in the conference agenda.

17. The Council of Chairmen of the VAAD is elected in the numerical strength approved by the All-Union Conference and manages all activity of the Association in the period between the conferences. Members of the VAAD Council of Chairmen may be removed from the Council only in accordance with a decision by the All-Union Conference or a decision by a territorial division of the VAAD. A position in the Council will remain vacant until the next All-Union Conference.

18. Each member of the Council of Chairmen heads one of the commissions.

19. The Council of Chairmen elects an executive secretary to conduct affairs of an organizational and executive nature.

#### 20. The VAAD Council of Chairmen:

—ensures that the broad masses of controllers take part in developing ATC regulatory manuals;

—takes an active part in developing programs for training and to increase skill;

—disseminates advanced experience and makes suggestions on the introduction of advanced equipment and technology, and organizes competitions involving vocational skill jointly with the Ministry of Civil Aviation;

—takes part in investigation of aviation accidents and their causes;

—implements measures to propagandize the controller's work;

—takes part in resolving social problems;

—carries out the functions of budget manager;

—establishes contacts with related organizations in foreign countries.

#### V. The Principle of Electing Management Personnel

21. In the elections of all directive organs of the VAAD, the principle of renewal of their membership and continuity of leadership is observed. The conferences and the Council are considered to be competent if no less than two-thirds of the delegates or elected members are present.

22. Candidates are nominated for the directive organs not only in accordance with collectives' recommendation, but individually as well. Each candidate is given the opportunity to speak in support of his program before the elections.

23. A candidate who has received the largest number of votes among the candidates who received more than 50 percent of the delegates' votes is considered to be elected.

24. The norm for representation of delegates at a conference is determined by the Council of Chairmen.

#### VI. Basic Principles for VAAD Interaction with the Ministry of Civil Aviation, the Aviation Workers Trade Union, and Other Organizations

25. The principle of public control lies at the basis of VAAD interaction with the Ministry of Civil Aviation, the Aviation Workers Trade Union, and other organizations.

26. The VAAD, jointly with the Ministry of Civil Aviation, works out an agreement (regulation) establishing the mutual obligations and principles for interaction.

27. The VAAD maintains close contact with the ATC department under the central committee of the Aviation Workers Trade Union in resolving the social problems of air traffic controllers.

28. The VAAD establishes contact with all organizations, cooperatives and citizens that wish to take part in the VAAD's work.

29. The VAAD takes an active part in the cooperative movement. Cooperatives may be formed within the framework of the Association.

#### VII. The VAAD's Funds

30. The VAAD is a juridical person, and it has its own account in the USSR Gosbank.

31. The VAAD budget is formed with the receipts from entrance and membership fees, which are transferred to the VAAD from territorial divisions in the amount of 30 percent of overall receipts, as well as the receipts from cooperative activity.

32. In order to resolve major problems of social and cultural activity, the Council of Chairmen may adopt a decision to grant a one-time subsidy to a territorial division, and an additional percentage of deductions for special-purpose use may be established within the framework of the entire Association to resolve the same problems.

#### VIII. Attributes of the All-Union Association of Air Traffic Controllers

33. The VAAD has its own pennant, emblem, badge, diploma for an award, and seal.

#### IX. Discontinuation of VAAD Activity

34. The activity of the All-Union Association of Air Traffic Controllers may be discontinued by decision of the All-Union Conference of the VAAD.

#### X. Entrance and Membership Fees

35. Entrance and membership fees are set by the All-Union Conference.

*From the Editorial Staff: A new concept is becoming part of our life—the association. As with everything new, it may fascinate and engender a certain euphoria about the opportunities and rights and move the main point to the background: the high responsibility for professional activity. Especially as the exemplary charter states concisely and unspecifically with respect to the responsibilities of the Association's members: "6. ...obliged to promote increased flight safety in every way possible..."*

*Any organization needs authority. And it grows not from the ability to advance certain demands, but primarily from work of high quality, the level of consciousness with respect to the work, and the neatness of the ranks.*

#### Il-18D 'Tsiklon' Aircraft Project Noted

18290110b Moscow VOZDUSHNYY TRANSPORT in Russian 9 Feb 89 p 1

[Report by VOZDUSHNYY TRANSPORT correspondent V. Torishniy: "The Lidar Picked Up the Return Beam"]

[Text] An Il-18D "Tsiklon" aircraft attached to the Test Flight Complex of the GosNII GA [State Civil Aviation Scientific Research Institute] has departed on an unusual expedition. On board are specialists who will be resolving certain aspects of a problem which has disturbed the people of the world for some time now.

"Tsiklon" as part of the aircraft's designation means that it belongs to the Central Aerological Observatory of the USSR Goskomgidromet [State Committee for Hydrometeorology and Environmental Control]. There are several such aircraft. For years the "Tsiklon" aircraft "chartered" by the observatory's scientists have been taking part in the most diverse kinds of research.



Exactly a year ago, an Il-18D "Tsiklon" with the side number 75442 was based on the island of Sredniy (Severnaya Zemlya), from where it took scientists to regions near the pole several times. They were looking for the so-called PSO—polar stratospheric clouds. In the specialists' opinion, these objects, by concentrating certain substances which are given off under the influence of man's vital activity on our planet, are capable of breaking a hole, figuratively speaking, through the ozone layer near the earth. And this is fraught with grave danger for mankind. Research has been conducted with a lidar—a unit which combines the features of a laser and a receiving device.

This result from last year's expedition made it possible to draw a conclusion on the need for further research in the Arctic's high latitudes. This time the program was coordinated with scientists from the United States, who have already begun their work in the North Pole region. Today the Il-18D "Tsiklon" is carrying, in addition to the lidar, a considerable amount of other equipment to study the vertical distribution of ozone and the overall amount of it in the polar airspace close to the earth.

We will tell our readers about the work of the expedition and the conclusions which will be drawn by the scientists in future issues of VOZDUSHNYY TRANSPORT.

## INTERSECTOR NETWORK DEVELOPMENT

### Roundtable Examines Transport Development Issues

18290128 Moscow GUDOK in Russian 19 Jan 89 p 2

[Roundtable of transport officials reported by A. Kapkov and M. Kaganskiy with remarks by I. Kharlanovich, candidate of technical sciences, Ministry of Railways; N. Shinkarev, candidate of technical sciences, GKNT [State Committee for Science and Technology]; R. Rutkovskiy, candidate of technical sciences, USSR Gosplan; Ye. Tishkin, doctor of technical sciences, VNIIZhT [All-Union Scientific Research Institute of Railroad Transport]; S. Rezer, doctor of technical sciences, VINITI GKNT [All-Union Institute of Scientific and Technical Information of the GKNT] and the USSR Academy of Sciences; Zh. Rusov, RSFSR Ministry of the River Fleet; A. Kolik, NII [Scientific Research Institute] of Automotive Transport; V. Belyayev, NIIAT [State Scientific Research Institute of Automotive Transport]; Yu. Timokhin, candidate of technical sciences; and V. Sheldunov, chairman of a scientific production cooperative in Orel: "The Transportation Hub Is a Knot of Problems"]

[Text] Considerable funds are being invested in the development of transport. Though its needs have not been met at present, it is receiving new equipment every year. Each form of transportation is struggling to increase speeds and accelerate the delivery of freight and passengers. But here is the paradox: the design speed of equipment—locomotives, motor vehicles, vessels—is increasing, but the time

en route is not being reduced. As an example, on the railroad the average speed in delivering freight is no more than 10 kilometers per hour.

The secret in the chest is a simple one: the achievements of scientific progress are nullified where the sectors come together, especially in transport hubs. Why does this take place? How do we overcome the deadlock? These and a number of other questions were the subject of discussion at a "roundtable" meeting organized by GUDOK and the transport sections of the Moscow branch of the USSR Union of Journalists. Specialists from the USSR GKNT, USSR Gosplan, the Ministry of Railways, the USSR [sic] Ministry of the River Fleet, the VNIIZhT, the NIIAT attached to the RSFSR Ministry of Motor Transport, and other organizations share their observations on these matters.

### "The Black Hole"

Transport is often called the circulatory system and the nerves of the economy. The transportation complex is unified in nature. So it is in theory. In practice, it is broken down into many sectors. There are dozens of transport ministries and departments—union and republic. And each one is threshing its own haystack, as they say. This is particularly apparent in the transport hubs, which, like the not unknown "black holes," swallow up large physical forces and assets.

I. Kharlanovich: The transport hubs are the worst bottleneck today. They hold up the flow of goods. The capacities of the lines make it possible to increase shipment volumes, but because of the impassability of the hubs and classification yards, this cannot be accomplished. This was very dramatically illustrated by the earthquake in Armenia. A great deal of essential freight was sent to the republic to overcome its aftereffects. The simultaneous influx there turned out to be unusually great, but if the hubs there had been broken apart we would not have had to organize cars for Armenia on the Transcaucasian, the Azerbaijan, the North Caucasus, and even the Volga Railroads...

N. Shinkarev: It has turned to be a disgrace: each department has set up its own ASU [automated control system] in a hub and they don't link up with each other and they cannot take information from each other.

R. Rutkovskiy: In my view, the largest losses in the hubs now result from the dissociation of organizations in their work and management. We haven't managed to crack this nut for a long time.

Ye. Tishkin: The two large railroad complexes—the MPS [Ministry of Railways] and the industrial departmental complexes—are operating in isolation, in accordance with the old rules, the old administrative scenario,

based on fines and junctions that were developed artificially. Evidently the most important point has been forgotten here—that transportation is a continuation of production.

S. Rezer: I might add that we are losing a minimum of 10 billion rubles because of the fact that the different forms of transportation do not link up in the hubs.

Interconnected transportation and technology systems—intermodal, container, and logistical—that are self-adaptive with the aid of economic levers are already in use in many industrially developed countries. Double-deck unit trains of large capacity containers are being utilized and satellite communication is being used to control train traffic...

Several words about some of these innovations. With the intermodal shipments, an operator at a central panel follows the delivery of any freight with the aid of a computer from its dispatch to its receipt by the customer. We call this "door-to-door" delivery, which is still very poorly developed.

There are no container trailers in the country at all. This exotic word identifies a very ordinary large-capacity container, only on wheels. No cranes are required for its transshipment. After rolling off the steel rails onto the asphalt it becomes a truck and trailer.

The so-called logistics system coordinates transportation with supply as early as the stage of planning material and technical support. The unique technology not only covers the destination stations and customers, but takes into account the work schedule of warehouses, station facilities, and other transport facilities. All these processes, naturally, are automated, controlled with modern computers.

But we still cannot put an elementary container system in order. And this evidently does not involve only and not so much a shortage of money and technical means; it is primarily the lack of proper organization and management. More precisely, it is the complete lack of material incentive for the employees of the different departments to develop a common technology and the poor business contacts with customers.

The lack of information about transportation partners and the achievements of associated sectors also plays a no less unfavorable role. Because of this, they often invent a "bicycle," as they say, and push scientific and technical progress to the side, not ahead. And it looks as if there has been no economic interest to date to force the search for innovations.

It is clear from all the views that the transport hub is functioning poorly primarily because it has no boss. Just who should conduct this complex orchestra, the hub?

### In Search of a Boss

The searches for a conductor have been under way for a long time. The never-ending experiments which emerge spontaneously here and there attest to this. These searches are aimed at smoothing the way for the mechanism of interaction, developing a unified technology for the hub's operation, and providing for a common data base, legal support, and an efficient system of material incentive for coordinated operation and responsibility. A great deal has been found.

I. Kharlanovich: The experience of workers in Leningrad, Odessa and Ilichevsk and electric furnace steel enterprises is well known. The experience exists, and it needs only to be further improved.

**But how is this experience to be put into practice? Promising undertakings have not come out of the confines of local experiments yet, although the paths to a solution have been outlined, all the same.**

Zh. Rusov: One of the most important problems is the best possible planning of shipments. Because we are far from the optimum today, a large number of railroad cars are standing idle. Either the cars needed do not arrive or not in the number desired. It appears that the necessary standards do not exist. We have been working with the Ministry of Railways and the Ministry of the Maritime Fleet on this for 5 years now. We are resolving the problems of quarterly planning quite successfully. There are coordinated solutions and programs developed by our institutes jointly with the VNIIZhT and the SoyuzmorNIIProyekt [State Planning, Design and Scientific Research Institute of Marine Transportation of the USSR Ministry of the Maritime Fleet].

Here is what we ran into: all the information should be provided on magnetic media. But where are they, these media? The ministries and departments that ship the freight are not providing them to us. We have gone to the Gosplan repeatedly. To no purpose. We cannot compel the freight shippers ourselves, and the central economic organs we have appealed to have remained aloof.

We want to begin automating the formulation of quarterly plans with direct combined reports in the first quarter this year. But again there is no assurance that we will receive the necessary information. Only one-third of the 120 consignor ministries are providing information, and then in distorted form.

And here is another variation being proposed to join interests. Seamen in the Leningrad transport hub and railroad workers in the Rostov hub are now suggesting that they form an association of transport enterprises. That is, the transport workers themselves are coming to an agreement and uniting in a certain consortium. They will be under obligation to help each other and provide economic incentive to each other. The motor vehicle

drivers are urging the railroad workers to reduce vehicle downtimes. The latter, in turn, provide incentive for the vehicle drivers to make better use of the railroad cars.

But this proposal has met with opposition. Not in essence, but in form, though. They say that an association is the same principle as patching up holes. Take the Leningrad port. How many obstacles there have been in receiving shipments. The inspectors here have had plenty of money. But a cost accounting organization was established to receive shipments under the transport administration of the Leningrad Gorispolkom. They have partially resolved the problem in the hub. But there is again lack of coordination at the stations of destination where the shipments are arriving.

This once again proves that it is impossible to resolve a problem at the local level alone. There needs to be a unified system of interaction. Does such experience exist?

#### Is a Third One Unnecessary?

Traditionally, transportation workers have attempted to resolve all problems of interaction among themselves. They have not been able to divide the pie, and they have always looked for someone to put over them so that he would command, coordinate, settle matters, and mainly, so that he would finance and divide the receipts. But economic methods came into use, and it turned out that they could manage without a commander as well. And these are not speculative conclusions.

A. Kolik: We talk all the time about the interests of the national economy. The shift to cost accounting conditions has revealed a simple truth—there is simply no such abstraction in life. And no matter how much we implore to coordinate our interests with the interests of the national economy, nothing will come of it. And nothing will come of it until we take into account the interests of the living participants in a linkup—the enterprises with their specific plans, and the living persons who need a bonus for their work.

And motor vehicle drivers have realized this truth before others today, apparently, because they are closer to their customers.

Enterprises of a completely new type, which have deliberately been deprived of rolling stock, have made their appearance in the RSFSR Ministry of Motor Transport system. These are intermediary cost accounting enterprises. And their task is to coordinate the interests of the customers and the shippers. And different kinds of shippers, not only the ones using motor vehicles.

There are enterprises such as this in many large centers now. And how has this turned out? First of all, they sensed customers' keen interest and readiness for such a form of service. The client is tired of having his hands tied with tariffs, shipping rules, and fines. He wants a mutually responsible partnership.

They realized at the enterprises that a unified organization is necessary to link up the transport workers' interests—a cost accounting organization which operates in the transportation hub in which both the motor vehicle drivers and railroad workers have equal rights. Practical experience in this already exists.

A. Kolik: Let us take the Mytishchi Machine Building Plant. There an intermediary was put between the plant, the railroad which is shipping the output, the motor vehicle drivers, and the motor vehicle enterprises. It is precisely the expeditor-intermediary who decides which mode of transportation is more suitable for shipment of the freight. He coordinates this with the consignees.

The intermediaries have been united in the "Avtotrans-obsluzhivaniye" firm. The work is based on multilateral contracts with all those taking part in the transportation. The prices are also contract prices. That is, the vital cost accounting interest of each component is taken into account.

#### Remark:

How is that? We have been speaking out against intermediaries all our life. A third link is superfluous and parasitical, they say...

What long-lived prejudices! Experience suggests that we cannot do without helpful mediation, not the fleecing example of the present. We are all appealing to God. We want the GKNT, the Council of Ministers, and the Gosplan to work out some regulation. And the economic mechanism should function. It seems to us that we have been groping for it and finding it. And it is completely possible to establish such cost accounting intermediary firms in the transportation hubs. They may be subordinated to an ispolkom based on the region of jurisdiction.

Incidentally, practically completed structures of this type—intersectorial enterprises of the Promzheldortrans [Republic Association of the Railroad Transportation Industry] and transport expediting enterprises—have essentially taken shape in regions. They are simply uncoordinated and require unification. But not on an administrative basis, on an economic one aimed at the principal payer—the customer.

#### The Customer Is the Judge of Everything

In the final analysis, it makes no difference to the client which means of transportation will deliver the freight. It is important to him to receive it fully intact in the full assortment, in the time required and at an acceptable cost. The state needs to ensure that this is done most economically, with the mode of transportation which provides for the maximum gain. But this situation can be achieved only if the system of transport service is organized so that the

client has the right of selection, and hence, so that there is a market of transport resources. When there is competition among the main forms of transportation, the system will be adjusted by itself.

V. Belyayev: Transport-warehousing systems have been extensively developed in the West now. Roughly up to 30 percent of the gross national product in all industrially-developed countries is spent to maintain them. Storage, transport and transshipment are included here. But what is the savings? Roughly up to 20 to 25 percent of the expenditures. A colossal amount! And several international associations have been established now to exchange experience in the operation of such systems in France, the FRG, the United States, and Britain.

#### Centralism and Democracy

**More and more specialists are coming to the conclusion that without systems adjusted to the customer, the client, transport cannot be raised to the necessary level. And interaction with a client makes it possible to attract his funds as well. But we cannot manage with this alone—the experience in developed countries shows that state regulation of the most important programs, and primarily their coordination, is still necessary.**

V. Belyayev: Of course there has to be state regulation. But what are the limits? In Japan, for example, the establishment of transport and warehousing systems has been subsidized by the state. The Japanese Government debated for about 7 years whether or not to establish a unified state motor vehicle terminal system or not. And they came to the conclusion that it was necessary. Several dozen terminals, together with the freight stations, were built at the same time with state funds.

A national state program was adopted at the very same time that these systems were established. For example, there are four major terminals in Tokyo. The processing capacity of each one is approximately 12,000 tons of freight per day. There are 400 loading and unloading positions at each terminal.

As a result, the industrial enterprises within the zone of operation of the terminal and transport and warehousing systems save roughly 20 percent of their transportation costs and the costs related to freight storage. And it turns out that the vehicle transport terminal systems, in the final analysis, determine the strategy for developing productive forces in the region. In my view, we should develop such systems as well, in the Urals or some location where there is a closed technology cycle.

It turns out that in Japan they were able to find that instrument which linked commercial consideration and state regulation, that is, what we have not been successful in doing with containerization, for example. Not unlike a state program of containerization, and each sector and region was assigned what to do. But containerization has not produced the desired effect yet. And to a large extent for

the reason that a unified transport and expediting firm has not been established, as specialists noted in the meeting. But after all, a container system, unlike any other system, includes all participants in the transport process in a common technology.

**Improvement in the organization of container transport is a good proving ground to develop interaction among all links in the transport complex, primarily in the hubs, where the interests of all departments are focused. But once again, in spite of the different views of the discussion participants, they were forced to admit: there is no boss in the transportation hubs, no perfected, mutually coordinated conception for development and technical progress.**

R. Rutkovskiy: We have no basis for the ideology and technology of work in the hubs. One of its main requirements is that freight be prepared to the maximum extent for transport. After all, today we carry useful products together with ones that are not adequately prepared for transport by any means of transportation. A lot of waste rock together with coal, let us say, which blocks up the throughput, freight and processing capabilities. So preparation for transport should be very thorough, beginning with enrichment of the shipments and ending with the problems of packing, containerization, and packaging. Ideologically this line is followed exactly. But the point is that not all ministries, especially the customers, have the abilities needed for this.

Some cannot prepare and pack freight in the proper manner, and others are not in a position to utilize the same container or pallet. Nor the mechanization, nor the warehouse, nor the rolling stock. But the main thing is the unwillingness to become involved in this troublesome work.

The requirement that the means of transportation be fully loaded and utilized efficiently is no less important. This applies both to the transportation of freight and passengers. A clear-cut picture exists of the flows and their distribution. The kind of passenger, the distance involved, and the means of transportation convenient to use are known.

**So there is a theory of interaction. But we are not succeeding in implementing it because the functions of that overall transport organ—and this was mentioned—which should coordinate the activities of all participants in the transport process in the country as a whole and in the transport hubs, with the shift to full cost accounting, are not clear. The outlines of its structure are already visible.**

R. Rutkovskiy: The Decree on the Transport Hub made its appearance last September. All the transportation ministries signed and coordinated it. This document regulates the work in the hub and the linkup of its components. I am far from idealizing the decree, but in any case, it is the first step which makes it possible to put the hub's activity in order.



S. Rezer: There is also a program of basic research on transport problems. It provides for a system of management and solution of socioeconomic problems. There is an entire complex of tasks here: computerization, information science, automation, reliability and safety, power engineering, the ecology. Prominent scientists are supervising the development of this program: K. V. Frolov, vice president of the USSR Academy of Sciences; academicians Ye. A. Fedosov, N. S. Solomenko, and N. V. Cherskiy; V. G. Inozemtsev, corresponding member of the USSR Academy of Sciences; and others.

#### Where Do we Take the Money?

A paradoxical picture is coming to light: there is a program to coordinate the work in the transportation hubs and balance the entire transportation complex, only there is no coordination and balancing. The lack of funds to develop equipment and technology is called one of the reasons for this. As an example, they mentioned that it is necessary to develop classification yards and railway junctions, increase the amount of rolling stock—especially the specialized kind—and transshipment equipment, and increase the information, control and technological systems. They called for the construction of high-speed, specialized mainlines. Many billions in funds were asked for this in very promising programs that are very long-term in nature.

Why are funds shaken out for programs that are less spectacular but capable of providing a return today with much less enthusiasm than for "projects of the century" that have not yet been worked out sufficiently? Why are they chasing after the unattainable? Probably because when it comes time to "pay the bills," it will turn out that there are no others, but those are farther away...

But they can also ask for short-term but specific studies. A mechanism for impeding scientific and technical progress also becomes apparent in this, incidentally. But after all, real scientific and technical progress also requires less funds for the final objective than many extensive programs and schemes.

As an example, R. Rutkovskiy, the Gosplan representative, expressed this thought. When we say that we lack cranes, motors, and other technical devices, we demand: give, and give more; the question immediately arises: Why? After all, if we introduce containerization and packaging, in a word, progressive technologies, much less funds will be required.

Yu. Timokhin: The transport component reaches one-fourth of the national income today. It exceeds one-half of the cost of certain types of products. One-third of railroad car turnaround time is the result of different above-norm idle times. There are losses because of malfunction and lack of coordination between transport workers, including in the hubs. And the present system of management is not mastering the situation. For 20

years they have been trumpeting about the ASUZhT [automated control system for railroad transport] and they have spent billions, but we say there are no funds!

V. Sheldunov: And there won't be any with such an approach. Everyone says that locomotives and cars have become several times more expensive. The effect from changes in design is a little over zero. But we remodeled an old series locomotive of the most ordinary type and increased its capacity considerably. More than 300,000 rubles in gain on each locomotive! Now we are rebuilding the old freight cars. We are increasing the volume of the body by 1.5 times as much.

So the people are speaking the truth: who wants to, looks for ways, and who does not want to, looks for an excuse. Obviously the problem is not only with the money, but the lack of incentive for scientific and technical progress of the persons in charge of it. Hence the way out is to ensure that economic benefit, not a command from above, is the principal standard of efficient activity by any transport subunit.

The increased independence of the lower-level components, naturally, also increase the role of the center. By freeing itself from petty tutelage and selective planning, it acquires a real opportunity to concern itself with long-range planning, in the work of becoming a coordinator and organizer of the transport complex, and not one that gives orders. Otherwise, vast funds will be swallowed up in the transport hubs as if in "black holes." And no command from above will stop this process.

#### RAIL SYSTEMS

**Deputy Minister Interviewed on Rail Safety Issues**  
18290089a Moscow ELEKTRICHESKAYA I  
TEPLOVOZNAYA TYAGA in Russian  
No 1, Jan 89 pp 2-4

[Interview with B. D. Nikiforov, deputy minister of railways and doctor of technical sciences by Special Correspondent V. I. Sergeyev, under the "Supervision of Running Safety" rubric: "Paramount Tasks of Locomotive Brigades and Maintenance Workers"]

[Text] Our special correspondent V. I. Sergeyev talks with USSR Deputy Minister of Railways and Doctor of Technical Sciences B. D. Nikiforov.

[Sergeyev] Boris Danilovich, let's begin our conversation with the overall state of affairs in railroad transport. Considering that we are having this conversation in mid-December, when no one can say exactly what the results for three years of the five-year plan period will be, please tell us what to expect.

[Nikiforov] Even today I can say that our consumers will have about 142 million t of above-plan freight shipped to them for the last three years. The productivity of our operational employees will increase by 19.5 percent, and



their wages will reach R268 per month. A total of roughly 300,000 persons have been relieved, over 160,000 of whom have gone to work in other sectors of the economy.

Passenger traffic volumes will increase at accelerated rates. The plan target for 1990 was already met in 1987. This trend is still being maintained.

For 2.5 years of the five year plan period the sector earned over R1 billion in above-plan rubles. Prime shipping costs declined by 2.2 percent. These work results show that we have everything we need to successfully solve the problems before us. But we absolutely must not rest on our laurels: we still have a great many resources we are not using, and we are still simply making major blunders.

[Sergeyev] Are you referring primarily to the unsatisfactory state of affairs concerning running safety?

[Nikiforov] Yes. The situation in our sector is defined precisely by how safely we operate, which also acts as a qualitative evaluation of our work.

For the past 5 years, the number of trainwrecks and accidents has not actually declined, except for 1988. Most of them occurred on the October, Azerbaijan, Transcaucasian, Alma-Ata, Gorkiy, Sverdlovsk, Odessa, West Siberian and Transbaykal, Donetsk, Lvov and West Kazakhstan railroads. The derailments, whose consequences were unprecedentedly severe, revealed serious miscalculations in the reliability of the transport sequence. Derailments, accidents, faulty workmanship and the discarding of equipment have lowered the carrying capacity of our railroads by 10-13 percent, are disrupting the rhythm of our shipments and are incurring multimillion-ruble losses. But the most important losses are those related to people's lives and health.

[Sergeyev] Until recently, the number of persons injured in railroad derailments went unreported, which caused rumors of various sorts to be spread. At the same time, the people killed and injured on the highways, which number in the hundreds, or a thousand times higher, has long been in print. For example, PRAVDA of 16 November 1988 reported that 40,000 people die and 260,000 are injured on our highways every year. Half of these people are left as cripples. How many have been injured in trainwrecks?

[Nikiforov] All this information has been known since the first of the year. In 1987, 157 persons were killed and 136 were injured on the railroads with 46 and 155 respectively for 1988. These figures concern us greatly, since the target set by the MPS [Ministry of Railways] to completely eradicate derailments and accidents is not being met. But in fact we have had years—1985, for example—when not a single passenger died.

[Sergeyev] Our readers are especially interested in the situation concerning running safety in the locomotives administration.

[Nikiforov] Frankly, it has been unsatisfactory for a number of years. Even though the number of wrecks and accidents has declined somewhat, they account for about 18 percent of all incidents. Approximately 58 percent of them occurred because of trains running stop signals, 18 percent because of exceeding the speed limit, and 10 percent because of incorrect train operation. Several incidents (16 percent) were caused by locomotive malfunctions. Such things used to be extremely rare.

Although the number of cases of defective work has diminished, there is still a lot of it: over 6,000 cases of spoilage occurred during 11 months of 1988, including 5,000 cases requiring standby reserves.

[Sergeyev] Running a stop signal has always been and is still considered to be a particularly dangerous violation of safety regulations. That is why we have always placed particular emphasis on preventing such incidents, but regrettably this has not yet had the requisite effect. Even though the number of such incidents fell to 150, that is still too many. Some 14 such infractions occurred on the Sverdlovsk Railroad, 12 on the Moscow, 10 on the West Kazakhstan, 8 each on the Odessa and Lvov railroads, and 7 each on the Baltic, Kemerovo and South Urals railroads. What are the reasons for this? How can such on-the-job failures be avoided?

[Nikiforov] Statistics show that the overwhelming majority of signal run-throughs (97 percent) happen in stations with half of these occurring during shunting operations and the rest during train service. Overruns of stop shunting signals are caused by engineers' ignorance of signal locations, particularly at stations with large track formations, misunderstanding the directions of the shunting inspector, incomplete preparation of the shunting route (without forewarning the engineer) etc. The devices for preventing this sort of sloppy error have not yet been installed on our locomotives, and vigilance-monitoring instruments fail to solve this problem. In this regard, a competition has been organized to devise the best instrument.

Incidences of stop signals at stations being overrun by train locomotives are distributed as follows: starting signals—79 percent; intermediate signals—8 percent, and entry signals—13 percent. These overruns are in large part related to engineers sleeping on the locomotives, inattentive signal observance, ignorance of signal location at the station, misunderstanding the signals, and incorrect brake operation.

The low level of discipline of the locomotive brigades in individual railcar shops, which stems from an unprincipled attitude to their job on the part of the the instructor staff, the shop directors and services, has led to repeated signal overruns in the same workshops for the very same

reasons. Thus, there were 4 overruns in the Sverdlovsk Shunting Yard overhaul shop, 3 each at Khashuri and Belovo and 2 each at Pskov, Vilnius and Kalinkovichi.

An investigation of safety violations shows that they are frequently the result of breaches of discipline. A locomotive engineer showing up or being on the job in an intoxicated state is particularly criminal. During only 10 months of 1988, some 279 of these pathetic excuses for engineers and 820 helpers were found out during pre-run inspections. We found 15 engineers and 7 helpers intoxicated on locomotives.

[Sergeyev] It is well known that the ministry has specified strict degrees of responsibility for these violations, i.e., taking away engineers' rights to operate a locomotive, dismissing them from the transport sector and sending pertinent materials to the investigative organs for the purpose of holding them criminally responsible. However, according to our information, only 122 engineers and 347 helpers, i.e., less than half were fired. And not all of those were found intoxicated on the locomotive were dismissed.

[Nikiforov] That is all true. This indulgent attitude towards drunkards can even be found on those railroads which have already had major wrecks, i.e. the Odessa and Southeast railroads. Neither the Main Locomotive, Personnel or Safety administrations or I myself have put enough pressure on the inspectors who cover up for these drunkards. In order to escalate the war on drunkenness, we intend to work up a program as soon as possible for introducing medical checks with special instruments in main locomotive sheds, to do so for passenger brigades as well, and in immediate transfer depots, and to make random-sample checks after runs.

It would, however, be a serious error to explain away almost all the reasons for running past signals as the result of a lack of discipline on the part of the locomotive brigades. Over a number of five-year plan periods, this facile approach has unavoidably led to the development and introduction of a vast number of measures and major outlays of material assets which have produced no positive final results.

Experience has convinced us that using various instruments and devices installed in the locomotive to make intensive and highly frequent checks of a train engineer's vigilance adds to his fatigue and often interferes with his operation of the train. Most important, it does not completely rule out the overrunning of stop signals. This is why all but one of the train engineers who took part in a recent meeting in Krasnoyarsk voted in favor of abolishing periodic checks of vigilance controls when travelling under the green light.

At present, practically the entire locomotive park is equipped with additional vigilance control devices (UKBM, L143, L132, L116, R1131 etc.) at a cost of over R21 million. But for all that, 86 percent of stop signal passings were done by trains equipped with properly working vigilance controls.

[Sergeyev] By the way, let us dwell in somewhat greater detail on the UKBM [not further expanded] device. The GUDOK editorial board has received a great many letters from people who were highly critical of this device. We published some of these letters. Many depots, feeling that these devices are too costly and inefficient, that they will not be in operation long and that they irritate the locomotive brigade, have not installed them on their locomotives.

The Collegium recently worked up these figures: in two years, about 20,000 UKBM instruments were manufactured, only one-fourth of which were installed in the depots. That leaves R15 million worth of them lying around as dead freight. How exactly are we to remedy this situation? The fact is, under cost-accounting [khozraschet] it is extremely difficult to force a collective, from above, to buy something it feels is unprofitable for a number of reasons....

[Nikiforov] It is mandatory that all safety devices manufactured by industry be installed soon. The delays in getting this done have been caused by a number of reasons.

First, some of the UKBM's were delivered to the railroads in incomplete form, for example, without relays. This is why they could not be installed on the locomotives.

Second, the UKBM devices were initially designed to be operated by one person, and this is why they have stricter vigilance-monitoring requirements. And they began using them on all the locomotives without changing the corresponding algorithm. And then the engineers began complaining en masse.

Then the MPS [Ministry of Railways] recommended that the intervals between whistle signals be changed from 60 to 120 seconds. Right now the question of the UKBM not usually reacting to the green light is being studied. It is true that this cannot occur mechanically since in this case no device which prevents the locomotive from rolling back as the result of a loss of vigilance is going to be activated. This is why the L168 device has to be reconnected to the UKBM device.

The railroads themselves, together with the locomotive shed collectives, will decide whether to choose this option or to use different devices.

[Sergeyev] Some 14 percent of the stop-signal passings happen when the safety devices are disengaged. It is surprising that the engineers who, while they are well aware of the possible consequences of running through stop signals [deprivation of the right to operate a train, being held criminally accountable and even putting their lives in danger] in a number of cases still disengage the ALSN and vigilance control devices. Does this tell us how much they resent these devices?

[Nikiforov] Yes, and the problem of introducing devices which do not irritate engineers, but rather help them, is becoming acute. Such devices include one which uses the engineer's ESK [electrical resistance, skin] parameters to register his level of watchfulness, and an SAUT [automatic brake control system]. In contrast to all the other instruments, the ESK device continually monitors the engineer's condition and sends him objective information concerning his state. Should he fail to react, the device stops the train.

Ministry Order No 32Ts of 1987 concerning the train wreck at the Kamenskaya Station outlines plans to introduce 13,000 SK [skin resistance] devices prior to 1990. In all candor it should be pointed out that the directors of the main locomotive administration, MIIT [Moscow Institute of Railroad Transportation Engineers] and the VNIIZhT [All-Union Scientific Research Institute of Railroad Transportation], having been satisfied with the first experimental lot that the device is fit for operation, although it needs some refinement, were assured and the matter was allowed to drift. When the faults were worked out, it turned out that the manufacturing techniques and equipment needed to produce ESK's must be of a very high level which our plants do not yet have. The MPS leadership and the Soyuzzhel-doravtomatizatsiya Scientific Production Association are presently solving these problems.

[Sergeyev] Boris Danilovich, ten years ago our magazine discussed the SAUT [automatic brake-control system] and its merits: it accurately stops the train at the stop signal in stations and on open lines, ensures that the train travels at maximum safe speeds on the green signal, yellow and red-yellow ALSN lights (taking into account the real configuration of the track section and the train's braking properties) and indicates brake application line closure. This system also directs trains along sections of track where there are permanent speed limits, and applies air, electric-air and electric brakes very efficiently. Actually, all wrecks and accidents caused by trains running past stop signals and exceeding the speed limit could be reduced to the absolute minimum. So why is the SAUT being introduced at such a snail's pace?

[Nikiforov] I'll tell you. The Moscow Railroad's Lobnya Overhaul Workshop has 8 years' experience in using these devices on all its electric locomotives. The Sverdlovsk Passenger Station Overhaul Workshop has been using the SAUT on its electric passenger trains for over a year. In 1988, the Sverdlovsk Shunting Yard equipped 5 of its freight traffic electric locomotives with this system.

The experience of these overhaul shops confirms that the SAUT performs all its operational functions. In June of last year, a rail network school was held, the participants in which were unanimously in favor of accelerating the introduction of the SAUT.

Sometimes the sluggish introduction of this system is blamed on its high cost. Actually if the fact that all our railroads must participate in introducing the SAUT is taken into account, the cost of each of these systems will be completely acceptable. Allow me to point out that the effectiveness of the SAUT is not restricted to merely preventing safety violations. It greatly increases the carrying capacity of our rail lines and our trains' traveling speed as well.

The other reason for the delay in introducing the SAUT is that it has some detractors.

[Sergeyev] Let's get back to the first reason, which is economic. It has already figured in the examination of the introduction of UKBM instrumentation. Another topic of discussion at one of the ministry meetings was the sluggishness with which the railroads are acquiring SMET-radio [not further expanded] instruments, improved air distributors and other new industrially-manufactured equipment. This is supposedly because of a lack of necessary assets. And this is happening under cost-accounting? Some railroad chiefs seem to be living just for today. It is as if they are saying, "After us, the Flood." Or are the railroads indeed experiencing economic difficulties?

[Nikiforov] I feel that the non-allocation of needed assets by the railroads is exclusively the result of inadequate explanatory work on the part of the main locomotive administration and because this administration's employees have failed to make these devices part of the prevailing instructions, as was done in the metro. A lot depends on the position of the railroads' locomotive administration chiefs.

These assets should be centralized so that they can be used to introduce new equipment for use in major directions (within the boundaries of several railroads) as was done, for example, when we upgraded our railroad cars.

[Sergeyev] Now for a ticklish question, Boris Danilovich, concerning running safety. Locomotive and collective brigades systematically complain to our magazine's editorial board, as well as to the MPS and other organs about the lack of basic concern on the part of the dispatcher staff and transport service and locomotive administration directors about creating normal living and working conditions for engineers and their helpers, particularly the younger ones.

Actually, locomotive brigades account for 12.7 percent of the number of transport workers involved in traffic operations, and they are responsible for almost 60 percent of all overtime hours worked. At this year's railroad engineers' network meetings, they have justifiably criticized the serious shortcomings in the implementation of Order No 28Ts of 1986, which made no radical improvement in the organization of labor and leisure time for locomotive brigades on individual railroads.

[Nikiforov] Yes, organizing our locomotive brigades' labor and leisure time has long been a particularly important unresolved problem, even though the main transport, locomotives and railroads administrations have made definite strides in setting this matter to rights. Compared to 1987, the number of overtime hours worked in 1988 fell 17 percent, but each employee still works a lot of overtime—some 120 hours each. And on individual railroads such as the Transbaykal, Sverdlovsk, Alma-Ata, West Kazakhstan, Kuybyshev, Moldavian and Gorkiy railroads—each worker puts in over 140 hours of overtime, with 180 hours worked on the Southeastern, 220 hours on the Transcaucasian, 230 hours on the Volga and 280 on the Azerbaijan Railroad.

Breaches of uninterrupted working time have declined by 45 percent, but this was done primarily by replacing travel line brigades, which makes it difficult to observe the labor law on granting off-days, and on providing appropriate between-run leisure time at the employee's place of residence and eliminating overtime work. A great deal of restover time is still allowed at turnaround stations.

Order No 28Ts, which makes operational and locomotives administration employees equally responsible for complying with the labor and rest laws pertinent to locomotive brigades has caused the chiefs of these services, who rely on each other, to avoid getting deeply involved in their problems. Thus, on the Transbaykal Railroad, and on a number of others as well, the alternate timetables which were worked up for trains to pass through "time-windows" still exist nowhere but on paper: practically the only place directors of the services and the locomotives administration record their losses is in statistical reports. The MPS repeatedly set the railroad chiefs the task of staffing the overall sheds with locomotive brigades in accordance with their actual needs for the amount of running performed but, as they say, things aren't moving.

A more active effort needs to be made to disseminate the Moscow Railroad's experience in organizing the work of its dispatcher staff and its overhaul shed personnel, in meeting its norms for running and for turnaround time at stations and for downtime in overhaul sheds, with the compulsory material incentives per shift, day and month.

It would be a good idea to specifically define the responsibility of locomotives administration employees for observing the standards for time spent by brigades and locomotives in the territory of the central overhaul shed, and transport service employees' responsibility for observing the standards for time spent on the section, including the time spent in intermediate depots, running with passengers etc. The practice of assigning locomotives and brigades to trains should be resumed, particularly for the purposes of working according to alternative timetables whenever a "window" appears on those railroads where this work is not being done.

A procedure needs to be set up on the railroads whereby every month division chiefs and their deputies, together with the leadership of the overhaul sheds, councils of labor collectives and the dispatcher staff must work out specific targets for the performance of running norms for all types of downtime and turnaround time for their brigades, must meet the strict demand and must provide material incentives for meeting established quotas without fail. In those places where working conditions are disrupted and timetables for arriving at main or transfer depot stations are not kept, the brigades should be replaced with maintenance crews.

[Sergeyev] Last year the large number of incidences of defective work caused damage on 67 percent of the locomotives. This causes the locomotives' technical condition to have a major influence on running safety. How do you assess this situation?

[Nikiforov] Frankly, the technical condition of our electric locomotives is causing a great deal of concern. These indicators have been on the decline ever since the beginning of the five-year plan period, and we know that the main locomotives administration chiefs of many railroads have taken comfort from the fact that some of 1988's indicators look a little better than those for 1987. In doing so, they are forgetting that last winter was a great deal milder than the one before.

The situation with the technical condition of our electric locomotives has stabilized, and our struggle of over ten years to get out of this catastrophic state—which was shared by the diesel locomotive park—has had its effect. We must give this problem our undivided attention.

[Sergeyev] One more question. Upon recently visiting the Perm Shunting Depot, I was pleasantly surprised to find out that the number of cases of defective workmanship there had declined in one year by half. The depot chiefs explained this as the result of having sharply raised the skill levels of their locomotive and repair brigades.

Throughout 1988, our magazine conducted a discussion we entitled "Train Engineer Training: Problems and Prospects." This discussion brought to light a great many shortcomings and generated many valuable suggestions. Soon we plan to conduct a "round-table" discussion with the main locomotives administration, and employees from educational institutions. Locomotive brigades, engineer-instructors and depot and service chiefs will also participate.

Will you take part in this meeting?

[Nikiforov] Certainly! I have some interesting observations to make on this subject. Invite automatic brake teachers to the meeting. I am greatly disturbed by the decline in our engineers' skills in air-brake and electric-air brake operation.



We in the ministry have "given birth to" a great many instructions and directives which are overloaded with figures and sometimes with conflicting recommendations. To remedy this, the main locomotive administration is preparing a number of recommendations for controlling brakes more efficiently.

[Sergeyev] Thank you for this informative and interesting discussion.

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**Railroad Staffing Practices, Structure Questioned**  
*18290100 Moscow GUDOK in Russian 19 Feb 89 p 2*

[Article by L. Lyubimov, Riga, under the rubric "Point of View": "How Many Deputies the Deputy Has—More Than 800 Million Rubles are Spent Annually on the Upkeep of the Administrative Apparatus of the Sector"]

[Text] How many features has GUDOK published by leading production workers, veterans, the managers of enterprises and delegates to the 19th Party Congress on the fact that excessive assistants to the chiefs of enterprises are not needed in transport, including for safety. Everyone should be engaged in this most important matter in the shipping process—from the minister on down to the switcher. Unfortunately, they have not yet found the time at the headquarters of the sector to explain why they are insisting on a solution that has been repudiated in the localities. Accidents confirm once more that the anticipated results have not yet occurred from the newly fledged assistants for safety.

Isn't that because only a third of the 100 of the vacancies in these positions have been filled in the Baltic Railroad? The rest of the managers are not hiring, they insist that there is no need.

Specialists feel that the main thing in ensuring traffic safety is improving the technical state of the facilities, and first and foremost the track and repair bases. But very little funding is being allocated as yet for that. Matters are poor with materials for the upper track structures. The situation with slip switches and cross-overs is especially critical.

A procedure that had been justified by life had existed since time immemorial. The division shift foremen or the railroad dispatcher recorded breakage or other incident on the railroad. Each of them then informed their managers and took the further steps envisaged by instructions. But that proved inadequate.

Key shift workers from among the deputy chiefs of the services were specially assigned to the administration of the Baltic Railroad (and others as well) at the direction of MPS [Ministry of Railways] to register nighttime instances of breakage. These were three highly paid executives. It was moreover required that all railroads

staff another four shift workers starting November 1 of last year. And more inspectors of dangerous freight were installed in the divisions. In truth, an incomprehensible enthusiasm of all sorts for checkers "ensuring" safety.

"And what if someone smashes up a railcar with dangerous chemical products? What then, will the need arise for another inspector for reagents?" say specialists ironically. And they say that perhaps that is enough inspectionomania? Wouldn't it be simpler to allow, as envisaged by law, the enterprises themselves under economic accountability to decide what controllers and inspectors they need? It would be better to direct attention toward the fact that there is just one (!) receiver on duty at night at key stations on all loading and unloading tracks and facilities. Here is where a car with dangerous freight really could go unnoticed among the others.

And even if there were five inspectors in the division instead of one, they would not see it anyway while the next incident happens. I am sure that if the divisions were really on economic accountability, they would have thought first of the expediency of the innovation here.

The Baltic Railroad has cut back by eight and a half thousand men since the conversion to the Belorussian method. There are appreciably fewer electricians, receivers, fitters and other workers providing for the safety of the equipment and traffic safety. It would seem that the staff of administrators should be reduced correspondingly.

Some comparisons are not without interest here, it seems. Say neighboring Belorussia surpasses the division by a third in freight and a little less in passenger traffic. There are six divisions in both places.

But the administrative apparatus of the Belorussian has been reduced by 168 people, while in Riga it is almost a third less. Another 15 specialists were moreover added to the passenger service and repair apparatus. And whereas six deputies remain out of nine at the former, there are twelve in the latter. This is even more than the largest railroad in the network—the Moscow Railroad—which includes, aside from 14 divisions, a Board for International Shipping.

Some deputies moreover watch over just one service, essentially duplicating its chief. I have long been observing the operations of the passenger service, its manager and its curator—the deputy chief of the railroad. It turns out that matters almost always proceed more peacefully and efficiently in this sphere when one of them is on vacation. By the way, even the presence of two such high commanders is unable to alter the situation with the repair of railcars. The changes are also weak in the quality of service in the trains. It is impossible not to recall here that too many cooks spoil the broth.

And all of this duplication is actually legal.



If the discussion concerns economic accountability in earnest, are so many managers and curators needed? People themselves are beginning to become the masters, and they are not only counting the money, but also thinking about how it is disposed of. And there they are in essence taking out a considerable portion of the profits to maintain an administrative pyramid.

If you ask any railroad worker who the maritime ports belong to and who runs them, the answer will be unequivocal—the Ministry of the Maritime Fleet. But why then does the Baltic Railroad have a deputy chief for port railroads? It seems it is simpler to get a job than to expand stations and junctions.

I remember that when I was working as station chief at Liyepaya, the volume of freight operations was decent—we were supporting a maritime trading port. And there was no position of deputy chief for freight operations then. The railroad corresponded with the ministry for two years to achieve that entity. They only obtained consent when they found the funds for wages somewhere in the railroad administration. And now it has become way simpler to institute the position of deputy chief of the railroad than to get rid of it. The former chief of the railroad tried to get by somehow without several deputies of his own, but he was not permitted.

The question is natural: why such mistrust in the chiefs of the services that they place redundant overseers over them? Initiative is undermined and responsibility is diminished thereby.

And what if the railroad were converted to leasing contract? A go-getter chief would not leave more than three deputies—that is the opinion of managers in the know.

Everything should be resolved by the services, which should be compressed by half. But then the people must be paid accordingly.

But instead of reductions in the apparatus, there is a different process underway. Two new services were recently formed in place of departments: economics, and statistics and economic analysis. Even from the names it is clear that they will be engaged in very similar business. Although much of the routine work was shifted to computers with the start-up of the railroad computer center.

According to the MPS list, there is still a possibility of converting a whole range of other departments to services as well: personnel, teaching establishments, capital construction. They evidently do not begrudge the money earned by the collectives of line enterprises for the maintenance of officials. But most incomprehensible is, why are they not halting the further bureaucratization of the services?

It would seem that the ministry has defined a strict norm for the maintenance of the administrative apparatus—eight percent of the overall staff. It actually remains almost one and a half percent higher—no more or less than 957 people. Can we really talk about labor productivity with such an approach? The figures are quite eloquent. The indicator has grown by 25.9 percent over the three years of this five-year plan.

The rate is not bad. But wages have not stood still either—they have jumped by 24 percent. Although according to the standards it should not have exceeded 15.6 percent, that is to say, every percentage point increase in wages is obliged to “buy” an increase in productivity of more than one and a half percent at a minimum. But that has not happened. If we call a spade a spade, they are eating up what they earn.

One can understand the sentiments of rank-and-file railroad workers when they see that management is not diminishing much in the face of reductions in fitters and machine-tool operators.

I have had to listen to the surprise and indignation at the continuing decree-mongering without any regard for the opinions of the lower enterprises at meetings of labor-collective councils. It is undermining trust in the reality of economic accountability, after all.

“Until they give us real independence, there will not be true economic accountability,” write the chairman of the labor-collective council of Tallinn Station, I. Khmelovskiy, and council members Ye. Petrova and S. Mikhaylova to the editors. “People are already losing their vested interest in raising labor productivity and improving its quality, and the passivity and apathy that existed for years are returning.”

But people are not yet losing hope for independence in business operations. They have a vested interest in economic accountability and self-financing. And they believe that common sense will triumph. Economics forces us to turn to it.

#### In Place of an Afterword

After the material had been prepared for publication, our correspondent from the Moscow Railroad, I. Kokoulin, transmitted information that has a direct relation to more than the problem in the Baltic Railroad alone. The party and the government, after all, have posed the task of reducing the administrative apparatus.

On the capital mainline they decided to resolve this task with reductions in the number of deputy railroad chiefs. There were 10 of them. The duties of two deputies in track and construction were combined. The duties of the chief of the shipping service and a deputy chief of the railroad had been combined as early as last year. Such

actions were also coming up for the railcar and track facilities. There should be five deputy chiefs of the railroad remaining as a result.

This process is working its way downward. The collective of the Moscow—Yaroslavl Divisions are abolishing some departments as an experiment—the locomotive, railcar, track, electrification, signals and communications—and are creating one department, the production and technical department. The planning, financial, labor and wages departments will be combined into an economics department. The structure of the enterprises of the divisions is also being improved. Some 50 specialists will be released thanks to this.

The same steps have been undertaken in many subdivisions of the mainline. A staff in which administrative workers comprise an average of eight percent of the total number of workers in the railroad, and even less for some divisions, had been affirmed as early as the first of February as a result.

Further improvements in the staffing structures of the enterprises are projected based on the experience that has been accumulated.

The example is striking. It seems that there is something to reflect on here for the other railroads. The more so as the growth rate of labor productivity and the financial status of the sector literally challenge us to spend the funds earned by the collective in efficient fashion.

### **Collegiums Adopt Program to Reestablish, Develop Rail Transport in Armenia**

*18290067 Moscow GUDOK in Russian 13 Jan 89 p 1-2*

[Article by M. Malakhova: "Armenia: A Program To Restore And Expand Transport"]

[Text] As GUDOK has already reported, a joint session of the Ministry of Railways and Ministry of Transport Construction collegiums and the trade union Central Committee Presidium was held in Yerevan. It examined the progress of the work to eliminate the earthquake's consequences. It discussed measures to restore and construct housing and production installations within a short period and solve other social questions. It planned ways to further expand the railroad's division in order to support the growing freight and passenger traffic volumes in a timely fashion.

G. M. Fadeyev, first deputy minister of railways; G. V. Falaleyev, deputy minister of transport construction; V. S. Myshenkov, secretary of the branch trade union Central Committee; and A. A. Kandilyan, chief of the Transcaucasian Railroad's Yerevan Division, presented reports.

E. F. Abdullayev, chief of the Azerbaijan Railroad; V. P. Khimchenko, deputy chief of the railroad troops administration; V. B. Vlazhiyevskiy, chief of the Transcaucasian Railroad; F. A. Pirumyan, manager of the Armtransstroy Trust; N. K. Isingarin, deputy minister of railways; A. S. Nikiforov, first deputy chief of the Design and Capital Construction Main Administration in the Ministry of Transport Construction; G. S. Ivannikov, chief of the Ministry of Railways Main Computer Center; B. D. Nikiforov, deputy minister of railways; I. A. Shinkevich, chairman of the rail transport and transport construction workers trade union Central Committee; and L. A. Tevosyan, chief of the Leninakan Railcar Depot, participated in the debates on the reports.

N. S. Konarev, minister of railways, and V. A. Brezhnev, minister of transport construction, spoke at the meeting.

Responsible workers from the USSR Gosstab, the Armenian Communist Party Central Committee, and the republic's Council of Ministers and Gosplan; representatives of other organizations; and the directors of a majority of the line subunits in the Transcaucasian Railroad's Yerevan Division participated in the meeting.

A complex program to restore and expand rail transport in Armenia was adopted.

Page 2 contains a report on the meeting.

Exactly a month has passed since the day of the tragedy that brought irreplaceable losses and enormous material damage to the Armenian people. Thousands of inhabitants perished and tens of thousands were left without a roof over their heads. Many installations in the production and social spheres were destroyed and damaged.

Transport did not avoid the disaster; 470 railroad workers and their family members perished and 388 were injured and are now recovering. A total of 947 families were left without a roof over their heads.

Truly heroic work by railroad workers, transport builders, servicemen, and everyone, who participated in the rescue and reconstruction work on the Leninakan-Kirovakan section that was in the earthquake's zone, has marked this period. All of the most important rail transport installations began functioning practically in a week, and this provided an opportunity to organize the evacuation of the population and to deliver within a short time many items connected with the people's life support systems: equipment, food, tents, housing, construction materials, and many other goods ....

This resulted from the selfless work of collectives from many railroads and transport construction organizations who came to help the victims.

A central Ministry of Railways headquarters, which coordinates and directs all of the work to eliminate the earthquake's consequences and organize the uninterrupted operation of transport, was established on the Yerevan Division immediately after the tragedy. Operational groups, which control the dispatch of freight and the movement of railcars to the disaster area are operating on many railroads and divisions and at railway junctions. The Ministry of Railways daily examines and resolves questions concerning the reconstructing of destroyed facilities, the providing of help to victims, and the organizing of transportation.

The collaboration and mutual help of the railroad workers have been demonstrated with special force under these extreme conditions. On the Yerevan Division, they speak warmly and cordially about the hundreds of specialists from the Ministry of Railways central staff and other railroads and of the numerous representatives from the transport mass professions who have helped to eliminate the earthquake's consequences from the very first day.

Representatives of many of our country's nationalities have worked here side by side, forgetting sleep and rest. Envoys from 19 railroads and the Ministry of Railways central staff are helping the republic today.

Approximately 700 railroad workers from the Tbilisi Division came voluntarily almost immediately after the earthquake to clear the piles of debris on the Spitak-Nalband section; they managed this enormous amount of work in practically two days.

Railroad workers from the Azerbaijan Railroad are working these days with an exceptional sense of responsibility. An unprecedented load has fallen on their mainline. The volume of freight shipments arriving in Armenia has grown sharply. Twofold more petroleum products than the norm and threefold more aviation fuel were dispatched over the road in December. An additional four points for making up trains destined for Yerevan, Masis, Leninakan, and Razdan have been opened up here in order to accelerate the handling of freight traffic.

Special attention is being paid to the passage of trains carrying people. Water supply points have been set up and trade in food products has been organized at stations along the routes of these consists.

A special schedule for transmitting priority freight to the Yerevan Division has been developed. Accurate information on the approach of trains and the cargo that they are carrying has been organized between the stations and divisions of neighboring railroads.

The well-coordinated work of the Armenian and Azerbaijan railroad workers at the junction points has permitted unprecedented movement speeds between the railroads to be achieved. At the station of Norashen, they

transfer 23-24 trains a day to fraternal Armenia when they normally transferred eight-nine consists here before the earthquake. Instead of 1-2 trains a day on the Idzhevan-Razdan section, six a day travel.

The business-like relations between the directors of the Yerevan Division and the Azerbaijan Railroad and between the Armenian and Azerbaijan railroad workers and the high sense of responsibility for the work entrusted to them permit the delivery of freight, equipment and people needed for the reconstruction work in the rayons that have suffered, to be assured.

The Armenian railroad workers and transport builders are displaying great courage and a high sense of duty. Many of them have suffered personal grief. They have lost relatives and close friends, but they have stood up under these conditions and have continued to work.

A. Asatryan, the chief of the Spitak Station and an honored railroad worker, who has devoted more than 40 years of his life to transport and who lost a son—an engineer in the locomotive depot—and daughter-in-law in this terrible calamity, was himself injured; however, he did not stop working. He gathered around himself the station workers, who remained alive, and actively participated in its reconstruction and subsequent operation.

O. Sarkisyan, chief of the Leninakan Station, lost his son-in-law and grandson under the wreckage of his house. His daughter received serious injuries and he had to look after her for several days. Having appraised the complexity of the situation at the station and having overcome his grief, he returned to his position, mobilized the collective and organized the station's work.

The mother of L. Tevosyan, the chief of the Leninakan Railcar Depot, whom he had looked for for a long time, was found under the ruins of a house. When the collective required his personal presence at work, he immediately got down to his duties and busied himself with restoring what had been destroyed.

The son of M. Gevorkyan, chief of the border station of Akhuryan, was killed and his wife was injured. Immediately after the earthquake, however, he was able to organize security and insure the safety of imported goods. During all this time, the station shipped freight abroad continuously.

G. Manukyan, an engineer in the Leninakan Locomotive Depot, has worked for 28 years in transport. He is a teacher of youth. K. Manukyan, his son, also works as an assistant engineer in that same depot. During these very difficult days, they did not leave the cab of their locomotive, practically working continuously.

Kh. Martirosyan, V. Ovakinyan, S. Martirosyan, V. Akopyan, M. Khachatryan, and many others, engineers at this depot who had people very close to them killed—mothers, wives, children, relatives—displayed labor heroism.

The transport physicians also performed their duty from the very first minutes of the tragedy. The railroad hospital was the only medical establishment remaining intact in Leninakan. They began to bring the injured here immediately. There were no communications, electrical power, water.... They operated and provided first aid without equipment and by the light from pocket flashlights.

The selfless work of many transport workers during the elimination of the earthquake's results has been singled out with the Honored Railroad Worker badge, watches inscribed with the owner's name, and monetary bonuses.

At the present time, 86 percent of the staff of enterprises and organizations in the earthquake zone have begun to work. Each day reveals new heroes. This is natural because the heroism was on a massive scale.

The initial stage has been completed. Through traffic has been restored. However, no less an important task now faces the railroad workers—bring train traffic to a level that fully guarantees the delivery of goods to the suffering rayons. Thousands of people from all the union republics have come to reconstruct the cities and villages of northern Armenia. Daily, thousands of railcars with equipment, food, construction materials, fuel, and other goods are being sent to the republic's address.

A dispatcher group on round-the-clock duty has been organized in the Ministry of Railways to assure the steady movement of trains over the railroads. It maintains constant communications with all participating ministries and departments in coordinating the dispatch of products to Armenia.

A permanently operating Ministry of Railways operational group in the Yerevan Division as well as information centers in Rostov, Baku and Tbilisi are effectively solving questions connected with planning the entry of trains onto the Yerevan Division.

Technological groups have been established to reinforce the work of Yerevan Division facilities.

Engineer brigades, station attendants, train make-up men, freight receivers and dispatchers, metal workers for repairing the rolling stock, and workers in other trades totaling more than 2,000 people have been sent on temporary duty to the disaster area.

The steps, which were taken, permitted the level of shipments on the Yerevan Division to be increased 2.5-fold by 1 January 1989. Today, 2,200 railcars are sent every 24 hours to the unloading sites—and this

practically without acquiring a single meter of additional track. At the present time, more than 1,750 railcars are being unloaded in the division each day, and conditions exist for handling 2,000 rolling stock units.

The republic's economic agencies must insure a high level in the smoothness of loading and unloading operations and eliminate the extremely low work rates during the first half of the day and on days off and holidays. One must unload at least 40 percent of the rolling stock during the night and remove freight from warehouses during the same time.

The volume of freight arrivals in the republic is growing with each day in connection with expanding reconstruction of the stricken cities and villages.

That is why primary importance is being attached to the construction of additional sidings and centralized unloading bases at the stations of Bayandur, Arevik and Akhuryan, which are the closest to Leninakan. More than 20 of the required 90-95 kilometers of station track and dead-end sidings had been built here by the end of December. Their construction must basically be completed during the first quarter.

The Armenian Industrial Rail Transport Association has actively joined in the unloading of the rolling stock. During the last days of December, the unloading of railcars at PPZhT [industrial rail transport enterprises] grew by 70 percent. Almost 50 percent of the total volume is being unloaded during the first half of the day.

It is necessary to double the volume of freight handling. For this purpose, the construction of additional sidings at servicing PPZhT enterprises is taking place and loading and unloading machinery is being commissioned.

Based on the amount of construction and assembly work to eliminate the earthquake's consequences, an amount of 2.5 billion rubles will be required in 1989. A total of 12.5 million tons of construction materials and approximately 3.5 million tons of other freight must be shipped to the Yerevan Division. The total volume will be 25 million tons.

According to estimates by specialists, shipping volumes connected with the reconstruction and building of projects in the republic, will grow by 216 percent in the next two years.

The Akstafa-Masis avenue will have to master the greatest addition in shipments. Here, shipments will grow by 310 percent. Shipping volumes on the Leninakan-Kirovakan-Sadakhlo section will increase 1.7-1.8-fold.

In order to improve the through-put and carrying capacity of the lines and the handling capacities of the stations and unloading areas, it is being planned—jointly with the Ministry of Transport construction—to first of all:



Equip the Sadakhlo-Leninakan-Masis line with automatic safety interlocks. Both the design and construction work will be completed before 1990. In order to use a partially packaged train movement schedule, it is planned to lay additional receiving and dispatching track at the passing sidings of Arteni, Getap, Akhpat, and Velidag and restore the automatic safety interlocks on the Masis-Norashen line. This will permit carrying capacity to be raised by 30 percent.

In order to insure steady operation of the Leninakan and Masis hubs, the construction of second tracks on the Masis-Echmiadzin, Oktember-Araks and Bagravan-Agin sections is required.

We are faced with improving the carrying capacity and technical reliability of the Akstafa-Masis line by expanding the limiting sections, laying additional track at individual stations, constructing locomotive and railcar facility projects in the minimally required amounts, and other measures. It is necessary to perform design and construction work with an approximate cost of about 19 million rubles over the next two years. This will significantly increase carrying capacity.

It is planned to reconstruct and expand the Masis Station, converting it into a high-capacity classification yard of network significance, and to build a mechanized gravity hump with the installation of additional parks and track at it. The station will handle railcar traffic from the direction of Norashen and Razdan.

In order to process railcars arriving from the Tbilisi Division, it is planned to build a classification yard in the vicinity of Kirovakan. To improve the approaches to the Yerevan Division, it is planned to lay approximately 100 kilometers of second track on the limiting sections, electrify 284 kilometers of lines and perform work to expand stations.

During the next two years, it is planned to develop the technical and economic bases for building a new Fioletovo-Kirovakan line with a length of approximately 35 kilometers. It will connect the Akstafa-Masis and Sadakhlo-Leninakan-Masis avenues

In order to insure effective management of the operating work and coordinated performance of the reconstruction work, it has been suggested that the continuity of the actions of the Ministry of Railways operational group in Yerevan be guaranteed. This will permit the coordination of the efforts of all participants in the reconstruction to be improved, raise the energy in solving questions, improve the interaction with local party and soviet agencies, and accelerate the completion of the work.

The locomotive depot at Leninakan was destroyed by the earthquake. An additional 25 mainline electric locomotives and 25 diesel shunting locomotives have been sent to the division from the Ministry of Railways reserve.

The routine repairs of locomotives will take place in Tbilisi, Kuybyshev and Yerevan—and a portion in Novosibirsk and Moscow—until the depot is completely rebuilt.

In order to insure operational work, railroads have sent on temporary duty 265 locomotive brigades, including 209 to the Transcaucasian, 51 to the Azerbaijan, and 5 to the North Caucasus railroads; 128 locomotives, have been sent—26 of them to the North Caucasus, 25 to the Azerbaijan, and 77 to the Transcaucasian railroads. A total of 56 metal workers have been sent on temporary duty to the Transcaucasian and Azerbaijan railroads to repair electric locomotives. At the present time these specialists are working in the locomotive depots of Leninakan, Yerevan, Sukhumi, and the Tbilisi Passenger depot.

The replacement of approximately 1,500 catenary system supports with flexible cross-members is required in the earthquake zone. It is planned to complete their replacement during the first six months of this year.

The administrations of the Ministry of Railways have developed and the collegium has adopted special programs for reconstructing and expanding railcar and track facilities, signal and communications devices, and other installations. All production, social and amenities projects will be built using antiseismic methods. A program analysis of railcar traffic using computer equipment is being introduced on the division.

The meeting of the collegiums and trade union Central Committee Presidium paid special attention to social questions and the staffing of the Yerevan Division. During the first six months of the year, it is planned to repair 101,000 square meters of housing and to complete the repair of buildings before the next heating season starts. A total of 12 railroads have assumed the reconstruction of projects in the social area.

A total of 42,500 square meters of housing will be rebuilt from the bottom up. The Ministry of Transport Construction will erect 3,500 square meters and 5,000 will be built by railroad forces; the remainder—by other branches during the rebuilding of cities that suffered from the earthquake.

Programs for rebuilding kindergartens, schools, hospitals, stores, public eating establishments, and medical service establishments for the railroad workers have been planned. The organization of training for specialists and workers has been provided for so that the division will be completely staffed with its own personnel by 1990.

The adopted complex program includes the reconstruction of installations and the construction of new ones to replace those destroyed; the improvement of the through-put and carrying capacities of the Yerevan Division and the approaches to it; the increase of loading and



unloading capacities; the laying of track for the parking of passenger cars; the building of construction worker bases; the assurance of the division's stable operations; and the building up of the capacities of the Transcaucasian Railroad's construction and operating subunits in order to perform repair, reconstruction and construction work on the territory of the Armenian SSR.

The program for reconstruction and expansion reckons on two years. Its realization has already begun.

The meeting expressed gratitude to all railroad workers, transport builders, railroad troops, enterprises, organizations, and party, soviet, trade union, and Komsomol agencies in the republic and the country for their great help in very rapidly eliminating the consequences of the earthquake and in reconstructing and expanding the railroads in Armenia.

#### **The Effects of the Earthquake on Rail Transport Installations**

The complete interruption of train traffic on the Leninakan-Kirovakan section.

Forty kilometers of main and station track structures, six traction substations and 14 man-made structures were destroyed and damaged.

Forty kilometers of the catenary system, 80 kilometers of overhead communications lines and five electric central switching posts were put out of operation.

Five railroad stations, railcar depot buildings, individual locomotive depot workshops, a communications building, a number of freight and track facility installations, and many service and technical buildings were completely destroyed.

A total of 164 living quarters with a total area of 180,000 square meters, in which 9,000 people lived, were damaged.

A total of 33 dwellings were completely destroyed at the stations of Spitak, Leninakan, Archut, Nalband, and Kaltakhchi.

Eleven railroad boiler houses ceased working because of damage to gas lines and equipment.

Water supply networks and equipment were damaged, including the 15-kilometer water line from the station of Dzhadzhur to Leninakan. Water supply equipment was completely destroyed at the stations of Spitak, Kaltakhchi, Archut, and Nalband.

A total of 16 kindergartens, with 1,580 places, six of which cannot be rebuilt at the stations of Leninakan, Spitak, Kirovakan, and Nalband, were damaged. The buildings of the railroad technical secondary school and vocational training school, two polyclinics, eight public

catering establishments, 34 stores of different types, a bread-baking plant, and the food base of the Yerevan Division's worker supply department were damaged.

The direct losses caused by the earthquake's destruction and damage to rail facility installations are in the tens of millions of rubles.

#### **Chronicle of reconstruction Work**

During the evening of 8 December, they connected electrical power to the Leninakan railroad hub.

The first electric train arrived in Leninakan from Yerevan that same day. Work was begun to reconstruct the track, catenary system, traction substations, electrical power supply lines, and STs [illegible] communications devices on the section up to Kirovakan.

More than 4,000 railroad workers were engaged in the work connected with eliminating the earthquake's effects and restoring train traffic. Subunits of the Ministry of Transport Construction and railroad troops were also involved in it.

On 9 December, the Kirovakan traction substation was put into operation. The catenary system and electrical transmission line on the Kirovakan-Archut section were restored. The railroad division's communications with the Leninakan rail hub were restored.

On 11 December, passenger traffic was opened up between Yerevan and Tbilisi along the new Razdan-Idzhevan line.

By 13 December, the clearing of obstructions and landslides from the track and the filling of cuts was basically completed. Operational train traffic was opened up over the entire Leninakan-Kirovakan section.

The railroad workers, transport builders and troops performed earth-moving work amounting to approximately 70,000 cubic meters.

On 15 December, the first Yerevan-Moscow passenger train traveled over the entire section that had been in the disaster area. Regular traffic had been opened up.

Starting on 12 December, special trains evacuated women, old people and children from the disaster area.

By 1 January 1989, 58 trains with evacuees, which carried 53,000 people from the disaster area, were dispatched to the cities of Georgia, the Black Sea coast of the Caucasus, the Ukraine, Moldavia, and the Baltic area.

The railroad workers transferred approximately 30 million rubles to the fund for assisting the victims.

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